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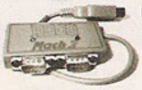
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Month **In View**

Dig out your duster and clean up your act, advocates **Nick Veitch** as he dashes out the back door…

One of the major problems with any computer system is that after you've been using it for any length of time it becomes inefficient. You collect all sorts of useless files and data, your disks become fragmented, your startup sequence has been hacked about so much it's difficult to remember what it's supposed to look like and you have loads of different programs duplicating functionality, some of which you probably haven't used before. And I don't know about you, but my libs drawer probably has more files in it than the local tax office.

The problem is that all this extra junk takes up valuable space and slows your computer down. So, we've decided to do something about it. Or rather we've decided to get you to do something about it. Ben has loads of helpful advice on what to do and how to get started in the feature starting on page 14, so get your Marigolds on.

One tool that's invaluable in keeping on top of your files is a decent file manager. *Directory Opus* is the most popular program in this vein, and we have a review of the very latest version in this issue.

If you want to tidy up your screen display you should be interested in the latest A1200 add-on, the BVision – yes, it's finally here and we give it a thorough going over on page 48. Plus, of course, we have loads more reviews of hardware and software to make your life easier, and our regular tutorial section is here as usual to help you get the most out of your Amiga every month.

If you're wondering why Colin has forced me into a silly costume (right) and everyone else has forced me to write a three page feature on my favourite Amiga stuff, it's because this will be my last issue as editor. Sniff. I hope you've all had as much fun out of the last few years as I have. But enough of all this self-indulgent nonsense, there's a magazine to get on with…



Nick Veitch
Departing Editor



SPRING CLEANING PAGE 14
If you've owned your Amiga for more than a few months, there's no doubt it will have collected all sorts of rubbish – we'll show you how to clean it up again.



NICK'S REVIEW PAGE 24
After 72 issues of *Amiga Format*, some past it bloke picks out his personal top software and sheds some light on the goings on behind the scenes.



BVISION PAGE 48
If you're an A1200 owner, this is probably one of the most important reviews you could want to read – is this Blizzard-based graphics card up to scratch?

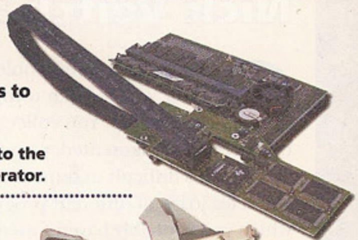


DOPUS MAGELLAN 2 PAGE 60
It's got nothing to do with charting new shipping routes around the globe, but it's got everything to do with file management. Neil Bothwick's your man.

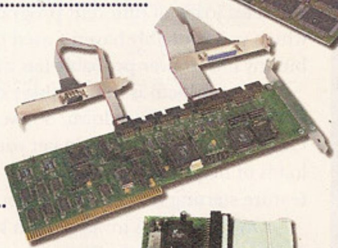
AMIGA FORMAT

Contents

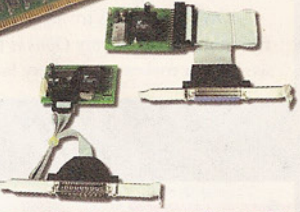
ISSUE 121 MARCH 1999



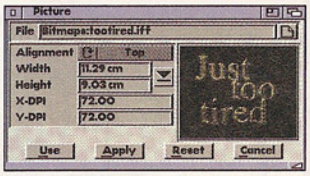
The BlizzardVisionPPC card plugs into the BlizzardPPC accelerator.



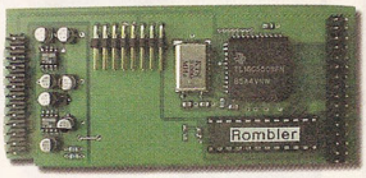
The IOBlix card, a very impressive input/output expander.



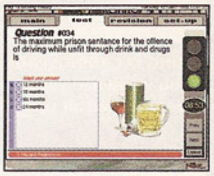
The IOBlix cards designed for both serial and parallel A1200s.



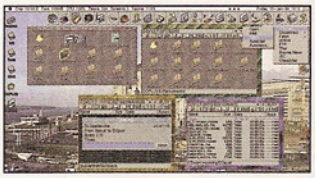
After *Final Writer*, *Wordworth* and *Final Copy*, can *AmigaWriter* make an impact?



The Rombler, with Synth, MIDI and Prelude connectors.



Test yourself with every question set for driving test theory exams.



An impressive screen, and the software works just as well.



Loads of useful bits and bobs, including themes to give your Workbench a new look with ease.



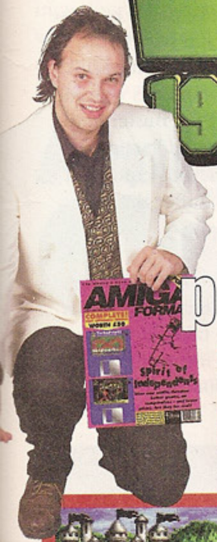
COVER STORY

p14 It's time for a Spring Clean



Spring is in the air and we think it's about time you gave your Amiga a well-deserved clean. **Ben Vost** presents some invaluable advice on how to clean up your hardware, from polishing your screens to tidying up your hard drive, with details on all the software and accessories you'll need.

The VEITCH Years 1993-1999



p24 The longest serving editor in *Amiga Format*'s history looks back on the highs and lows of working on the best Amiga magazine around. **Nick Veitch** chooses his top games, best moments and biggest blunders of the last six years...

CD-ROMS

96 AFCD37

Run a Mac with *Shapeshifter*, hear our top *Sequencer One* tunes, try *CYCAS* and there's still over 3,000 directories!

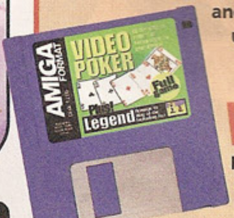


COVERDISKS

92 BEATBOX 2

A complete, fun, new and extremely easy to use music program.





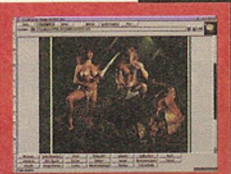
VIDEO POKER

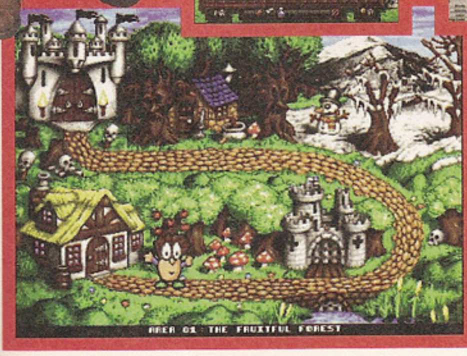
Deal the cards and get your money ready for this great poker simulation.

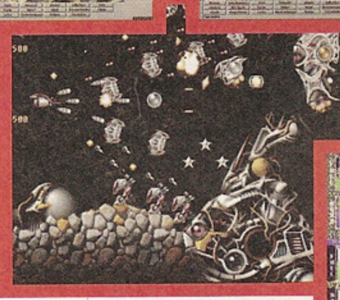
SCREENPLAY















Shooting, puzzling and retro-action, all in this month's ScreenPlay.



WHAT'S UP?

Coming out fighting
Development of the BoXeR motherboard is almost complete.

A lively games scene
Alive mediasoft reveal their huge line up of games in development.

AF bulletin revamped
Even better online service promised.

WORLD NEWS

BoXeR imminent

After what seems like an interminable wait, development on the BoXeR replacement Amiga motherboard is drawing to a close. Blittersoft have informed us that they should be taking deliveries of the first prototype runs of the motherboard in the next week or so, and that we should be able to review it, if not in the next *AF* then certainly in the following issue.

Those who are veterans of Amiga shows may well have seen Mick Tinker talking animatedly about the BoXeR concept to many leading Amiga developers over the years, and possibly showing them a mock-up of the board that he seems to have finally finished. Now he'll be able to show them a working machine.

Delays have been caused by Mick being unwilling to settle for second best and also because of the huge technical problems that have cropped up in the legacy of Amiga motherboard design. However, these appear to be resolved now and the BoXeR will have a full 64-bit motherboard throughout, giving a huge increase in speed, especially when it's used with the proposed G3 accelerators for the machine.

Other technical advances include the fact that the machine will now ship with two independent IDE ports, both of which will be capable of UDMA transfer (upgradable via Flash ROM).

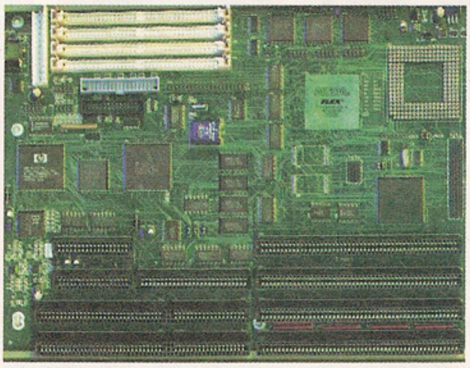
> "...the BoXeR will give a huge increase in speed, especially when it's used with the proposed G3 accelerators..."

In addition to this, the BoXeR will also sport fully-fledged serial and parallel connectors and the layout has been slightly altered to allow for Video Toaster use. The way that some of these enhancements have been implemented mean that chip RAM access times should also be reduced.

Last, but by no means least, the FPGA replacement for Buster should now work at full efficiency, which will mean that the Zorro III capability of the BoXeR should approach Dave Haynie's ideal of 35Mb/s for bus transfer speed, and makes the Voodoo II 3D accelerator a more worthwhile target for 3D acceleration. The Voodoo 1 has been used for the add-on for the PicassoIV partly because of the fact that it will still stretch the current Zorro III implementation.

Blittersoft are now in talks with Mr. Tinker to see if this FPGA Buster could be modified so that it could act as an upgrade for other Zorro III-equipped Amigas that currently suffer the bottleneck caused by the original Commodore Buster chip.

We'll have more news for you on the BoXeR in the next issue, by which time we hope to have taken delivery of our board, but in the meantime you can call Blittersoft on 01908 261466 for further information.



The BoXeR motherboard as shown in *AF111*, although it might have changed somewhat since then.

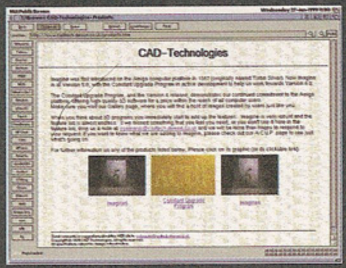
NEW AF STAFFER

We need a new staff writer to join the editorial team at Amiga Format Towers, so if you're an A1200 owner with an interest in music, the Internet, coding and hardware, and you know how to write witty, informed and on-time copy, you'd be ideal.

If not, but you're interested in the post (which would involve you moving to Bath), drop me a line explaining who you are, where your Amiga expertise lies and why you'd like the job, and we'll get you down for an interview.

You can send me an email at ben.vost@futurenet.co.uk with the subject "New Staffer", or send me a letter at the usual address: AF, 30 Monmouth Street, Bath, BA1 2BW.

Imagine still going strong



The CADtech website (above) and some of the impressive results (right).

Rumours of its demise have been greatly exaggerated – *Imagine* is still going strong and is adding support for more Amiga items as time goes by. On its way to version 6 now, it has PPC support for global effects, graphics card support and much more. The company now in charge of the project, CADTech, offer the current version for sale over the Internet or by mail.

The Constant Upgrade Program, where you receive the very latest version at all times, is also still in full force, and since updates come thick and fast it's worth bearing in mind that being on the Internet for this really is a boon.





For further details, visit the CADTech website at http://www.cadtech.demon.co.uk or write to them at: 4 Dunan Place, Flat 2/1, Easterhouse, Glasgow, G33 4JL, Scotland.

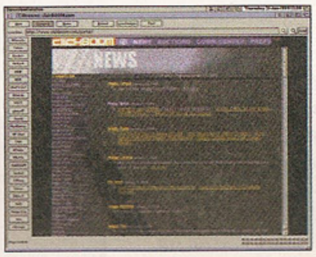
clickBOOM go online

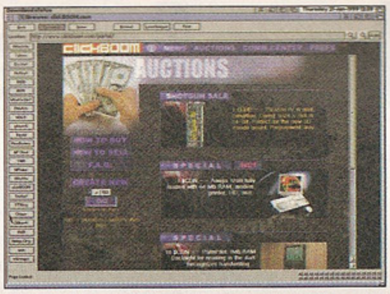
There's a new online service that should be available by the time you read this. Called Portal, it comes from clickBOOM and aims to offer a coherent single source for Amiga news, a message centre for subscribers and, most importantly, an auction function for anyone who wishes to trade Amiga software or hardware.

So far, it looks very impressive. It's polished, as you'd expect if you've spent any time looking at clickBOOM's website in the past, and it seems to work pretty fast, although that may change as more and more people start using it.

The auction side of things is very classy. If you're a subscriber, you can sell whatever Amiga equipment that you want in one of three ways, including a "shotgun" sale which isn't an auction at all, but a sale at a fixed price. As a seller, you pay a commission to clickBOOM for hosting your auction, and you can add pictures to your description and turn it into a "special" sale, which puts it at the top of the list for an extra fee. The website should be online by the time this *Amiga Format* goes on sale, and can be found at http://clickboom.com/portal

Get personalised news from Portal.





Buy and sell Amiga goods using Portal's excellent auction facility.

Modem creator hangs up

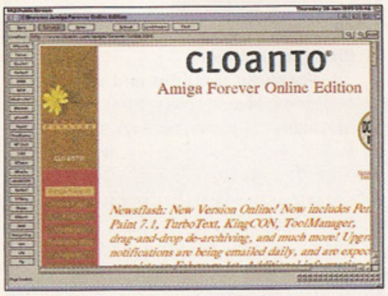
The Hayes Corporation, which produced the first consumer modem back in 1981, have closed down after a two year fight for survival.

The Atlanta-based company filed for bankruptcy last year and, after failing to borrow the money to continue, have now decided to liquidate their assets. As a result of the move, over 250 employees have lost their jobs.

Hayes produced the first PC modem, the 300-baud Smartmodem, and developed the AT Command Set, the language which most modems still use in order to transmit data.

Amiga Forever Online

A new version of *Amiga Forever* is available solely over the Internet, priced at $29.99, with improved networking and classic Amiga utilities already installed. You get things it's hard to live without, like *Picasso96, KingCon, Installer, LhA*, tested DataTypes and commodities, but no controversial hacks that might cause dissent.



Emulate your Amiga on a PC.

The icons have been spruced up and *PPaint 7.1* is now bundled, with the latest *TurboText*, configured into *ToolManager*. The total download is around 6.5Mb, from http://www.cloanto.com/amiga/forever/online.html

Special Offer!

The Amiga Design Workshop UK are offering a special price to any *Amiga Format* readers who want to become members.

All *AF* readers can save £3 on an annual subscription, reducing the price from £15 to £12, or £7 on full membership, which normally costs £30. Full members will receive a monthly coverdisk and reduced rates for group activities.

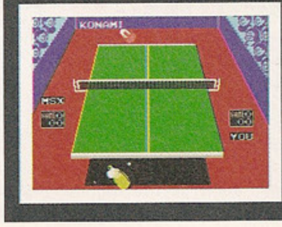
The post of Web Master, advertised in a recent *AF*, is still open for applications.

For more details, write to: The Amiga Design Workshop UK, 2 Moorden Cottages, Chiddingstone Causeway, Tonbridge, Kent, TN11 8JB.

Include an SAE for an application form and introductory pack. This offer is also open to international readers.

New Emulator CDs

Epic have released a couple of new emulation CDs. *Flash ROM 2* is an update of their compilation CD-ROM of emulators for Amigas, and *MSX Nostalgia* is a collection of goodies for enthusiasts of the MSX micros developed by Microsoft and the Japanese computer trade association ASCII, in the mid 1980s.





Simon Goodwin will be reviewing them, alongside the ground-breaking FMSX 2 Z80 compiler.

You can expect Simon to be really excited by these new releases from Epic.

Continued overleaf ➡

100 issues ago

AF21 April 1991



We look at what was going on in the Amiga market 100 issues of *AF* ago…

Cover feature: Picture this! A graphics special which compared art packages (which covered 19 art-related packages, including *Art Dept.* and *Comic Setter*), and gave a profile of three Amiga artists.

On the disks: Still only one coverdisk which contained *Moonshine Racers*, a demo of *Hyperbook* and an animation tutorial.

News: Workbench 2 for the A500, *Amiga Shopper* and *Amiga Power* launched, the fact that the A500 would have 1Mb as standard from March 1st, 1991. We also had the news that the A3000UX (a Unix box in the guise of a normal A3000) was launched and that the rebadged A2000, the A1500, had been reduced by £150 to £999 for a 1Mb A1500 with 1084S and a bundle of software.

Finally, there was news of a launch for the CDTV and an announcement of an accompanying CD-ROM drive for the A500.

Prices: If you wanted to buy floppy disks in bulk to open your new PD library, they would cost you 31p each, including VAT (remember, in those days it was at 15%) and a label, or 65p each for Sony high density disks. A lot of PD was at comparable prices to today, but there were a lot more PD companies around then as the Internet hadn't yet made an impact.

Games reviewed included: *Deuteros* by Activision 95%, *Chaos Strikes Back* by Mirrorsoft 89%, *Back to the Future III* by ImageWorks 82%, *Emlyn Hughes' Arcade Quiz* by Audiogenic 38%.

Serious products reviewed: SupraDrive 500XP, *ProWrite*, *QuickWrite*, *Excellence! 2.0*, *Masterboard*.

Notes: A certain Mr. Larkin in Eire notes that the advances made by the A3000 and A3000UX wouldn't be enough to stop the PC from overtaking the Amiga in terms of the speed of its hardware and quality of graphics. Eight years on, he's not far from the truth…

Pages: 228 **Cost: £2.95**

New look afb

We're currently getting rid of the old, unfriendly Amiga Format Bulletin announce-only list in favour of a newer, much friendlier version that allows you to post to it too.

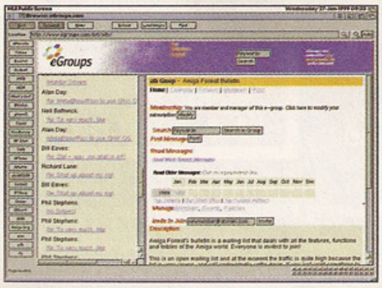
Fans of the announce list should also be aware that we'll still have an announce list (at a different address) but it will be cut down from previous versions since a lot of the "important" parts of it will be incorporated into the open list instead.



The calendar should be useful to everyone, especially as a guide for when to send your news or work for the CD in.

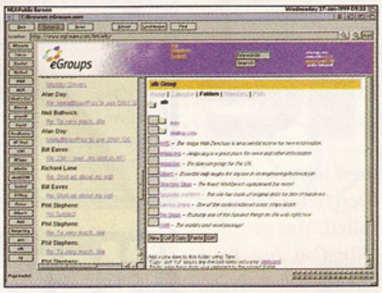
The open list has a lot of traffic right now, maybe 60-70 messages a day, but if that's too much for you, you can always configure your subscription to it to just read the messages off the web.

In addition to the chat, there's also the facility to use the calendar to see when the next *AF*'s out, to check the deadline for sending your news in or for sending stuff for the CD. There are also folders which will contain important messages or links to websites, and finally there are polls which are easy to use and can be started by anyone.

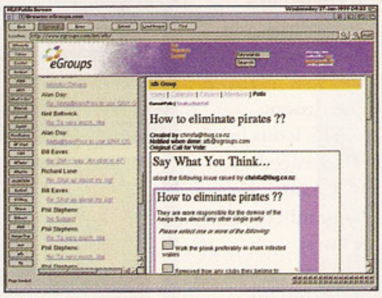


The average number of messages per day works out to about 65 right now, although I expect that will get somewhat lower in the near future.

In short, the all-new afb is better than ever, and all you need to do is sign up. Point your browser at http://www.egroups.com/list/afb/ to sign up to the open list and http://www.egroups.com/list/afb-announce/ to subscribe to the announce-only list, which will give you a single message every four weeks that lets you know what will be in the next *AF* before it's out on the streets. You don't have to subscribe to both since the message will be crossposted to both lists.



The folders for AFB will contain handy hints posted to the list, and links to important websites.



The new poll feature will replace the old poll in the original AFB, but it will now be open to everyone.

Kickstarting the show year

The second Kickstart event will be taking place in Surrey on Saturday 27th February this year, and will have nearly 30 exhibitors selling and showing their latest wares and second-hand bargains. In addition, there are prize raffles for Amiga 1200 Magic Packs and other prizes supplied by Amiga International, who are sponsors of the Kickstart show. Other events include gaming matches for further prizes, with *Doom* and *Quake* deathmatches and the chance to pit yourself against other budding *Sensible Soccer* and *Skidmarks* fans.

There'll be demonstrations of the latest hardware and software by the Kickstart user group, who'll obviously be welcoming new members at the show, and who will also be on hand to give advice and troubleshooting help to Amiga owners present.

Last, but not least, Kickstart will be taking advantage of the event to launch their new monthly *Insight* magazine, which will be available to all Amiga owners, not just existing Kickstart members.

For show enquiries and stand bookings, please contact Ray McCarthy (Show Promoter) on ray@tadworth.demon.co.uk or call (01737) 215432.

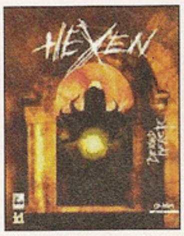
Location: Brook Hall, Brox Road, Ottershaw, Surrey.
Date: Saturday February 27th, 1999.
Time: 1pm-5pm
Admission fee: £1
Parking: Two car parks with space for over 200 cars.

Staying Alive

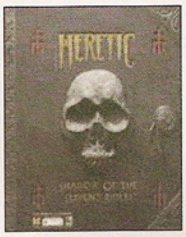
Alive mediasoft are busy bunnies. They've got a big line up of games fresh from the presses for you. Not only have they arranged for *Heretic* and *Hexen* to be made available to Amiga owners thanks to the recent ports made, but they've also promised us that they'll have *Napalm* and *Putty Squad* by the time you read this, plus they've recently tied up a deal to get *Abuse*.

They'll also have the new edition of their printed catalogue/magazine, *The Pulse*, and their new CD catalogue which contains demos of their favourite games, available soon. Contact Alive for details.

To celebrate the Millennium, Alive are holding the world's biggest Amiga software survey in years. They've always offered a search service so that old titles could be found for people who wanted them, and over the last 10 years the Amiga has given us thousands of brilliant games (not to mention just as many crap ones!). Now, by casting your vote you can help your favourite games see the light of day once again.



Alive will be bundling the Amiga version with a PC version of the game.



On June 1st, Alive mediasoft will announce the survey winners, giving you the chance to obtain the top ten from each category, such as best adventure, best beat-em-up and so on. During the months running up to the announcements, Alive mediasoft will be putting in every effort to obtain the winning games, although many of the games will obviously be subject to limited availability.

All voters in the survey will be entered into the prize draw for the chance to win one of the prizes below:
1st prize: £100 Alive gift certificate.
2nd prize: One of three £20 Alive mediasoft gift certificates.
3rd prize: One of ten prizes of free software titles.

Full details of how to enter, along with a voting form, are going out to all *Pulse* subscribers. Contact Alive mediasoft on 01623 467579.



Have you voted for your favourite game yet?

Fly to Amiga '99

Amiga St. Louis, organisers of Amiga '99, have the unprecedented prize of two half-hour training flights in TWA's 727 flight simulators to offer to people attending their show in March. After the banquet on the Saturday evening, the two winners will be whisked away to TWA's training facility where they'll get the chance to try out the full-on Boeing 727 simulator that's used to train pilots all over the world for their duties in the sky. The lucky individuals will fly with a real pilot in this simulator and will receive an official flight logbook, which will list the 30 minutes of time spent flying this marvel of flight training.

Interested? Visit the Amiga '99 website at http://www.amiga-stl.com to get details of other prizes, or to find out further ordering information for tickets. The Amiga '99 Show is being held in St. Louis, MO, on Friday March 12th to Sunday March 14 at the Henry VIII hotel. Winners will be selected from the Saturday prize drawing at the close of Saturday's show.

Amiga Energy Boost

The Amiga fanzine, *Amiga Energy*, will be available free to UK user groups for a limited period. The move is designed to encourage user groups to take them up on their discount rate for orders of 10 copies or more.

The offer is limited to one copy per user group and *Amiga Energy* hope that applications will be made by the organiser of the club directly. To get your free copy, normally worth £1.80, send an A5 envelope with your name, address and a 39p stamp to: Amiga Energy – User Group Offer, (Dept AF), Infinite Frontiers, PO Box 8966, Great Barr, Birmingham, B43 5ST.

Amiga Energy also ask for brief details about your group, such as its name, how many members you serve, where and how often you meet, the area you work in and any other details.

For more information, email infinite.frontiers@mcmail.com or visit http://www.infinitefrontiers.mcmail.com

Online info offline

Amiga Information Online is now available by subscription for those without Internet access. For £6 (£7 for those outside the UK), you'll receive as issue of *Amiga Information Online* each month for six months, sent out on the day of release by first class post.

If you'd like to subscribe, send a cheque payable to Chris Seward to: Chris Seward, 10 Scafell Close, Eastham, Wirral, Merseyside, L62 9EU.



Vital Horgan



The Boing Ball: timeless international icon of quality and innovation or rubbish old logo destined to be tossed aside when the first new Amiga products are launched?

One of the reasons I pose the question is that it just occurred to me that the Boing Ball was never really intended to be the official Amiga logo. It just seemed to blag its way in through the back door when the real logo, the Rainbow Tick, started to look a bit shabby.

When Gateway acquired their "box of stuff", as they put it, they found it contained this red and white checked ball which I'm not sure was even trademarked Amiga property in the first place.

Either way, no-one would be able to wrestle it from Amiga Inc. and their lawyers now, but would anyone want to? What exactly does the Boing Ball say or do to earn its keep as a logo? Not very much, in my opinion.

Take Apple's logo. It's obviously an apple, it's very simple and it works, even if there's no colour available, so it can be stamped or embossed onto surfaces.

Windoze? I'd say that logo isn't too strong, but again, at least it looks like a window. Nintendo's N64 3D monogram logo has an obvious connection to the name itself, as does the PlayStation insignia.

That doesn't necessarily mean the Amiga logo has to be some kind of letter 'A' in order to do a good job – the Nike 'swoosh' is possibly the world's best known logo and that has no direct link to the name at all, but I'm sure it could do better. The fact that (ex) Amiga staff can entertain us at shows by making the logos with red felt tip pens and ping-pong balls is nice, but not nice enough to justify a corporate logo in this cut-throat world of consumer technology.

When the time comes for the rebirth of Amiga, don't be surprised if the Boing Ball is rudely tossed out to make way for a new logo that's kept a small design company in business for the previous 18 months. Call me a traitor, but that's something I wouldn't mind happening at all.

Tony Horgan





SHE HAS TWO THINGS LEFT TO CLING TO. ONE IS HER



When the picture was taken, this Honduran girl had just survived the largest natural disaster to hit Central America this century. A mudslide wiped out her home in the Tegucigalpa hills. In a state of shock, she clings to her pet dog - she also clings to the hope that someone, somewhere will help.

The hurricane is over, the relief effort is just beginning.

The disaster may have happened in November, but the need for outside aid is more pressing as time goes by. The hurricane *caused immense short-term damage, but the long-term effects could be catastrophic.*

The fields are decimated and left infertile. Bridges and roads have been swept aside and access to some regions is extremely difficult. Ironically, though much of the country has been flooded, there is little uncontaminated water to drink. The risk of cholera and typhus is always there, and could reach epidemic proportions.

The people of Central America are resilient and resourceful, but they do need our help to put the basic infrastructure in place so that they can start to re-build their lives.

Don't let her down - please give what you can.

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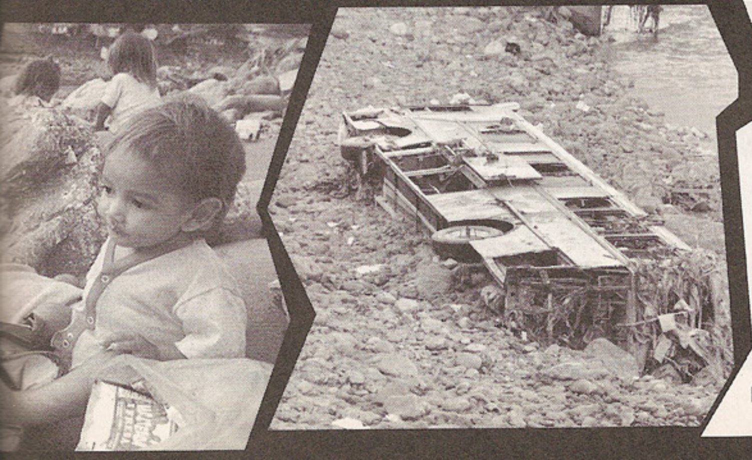
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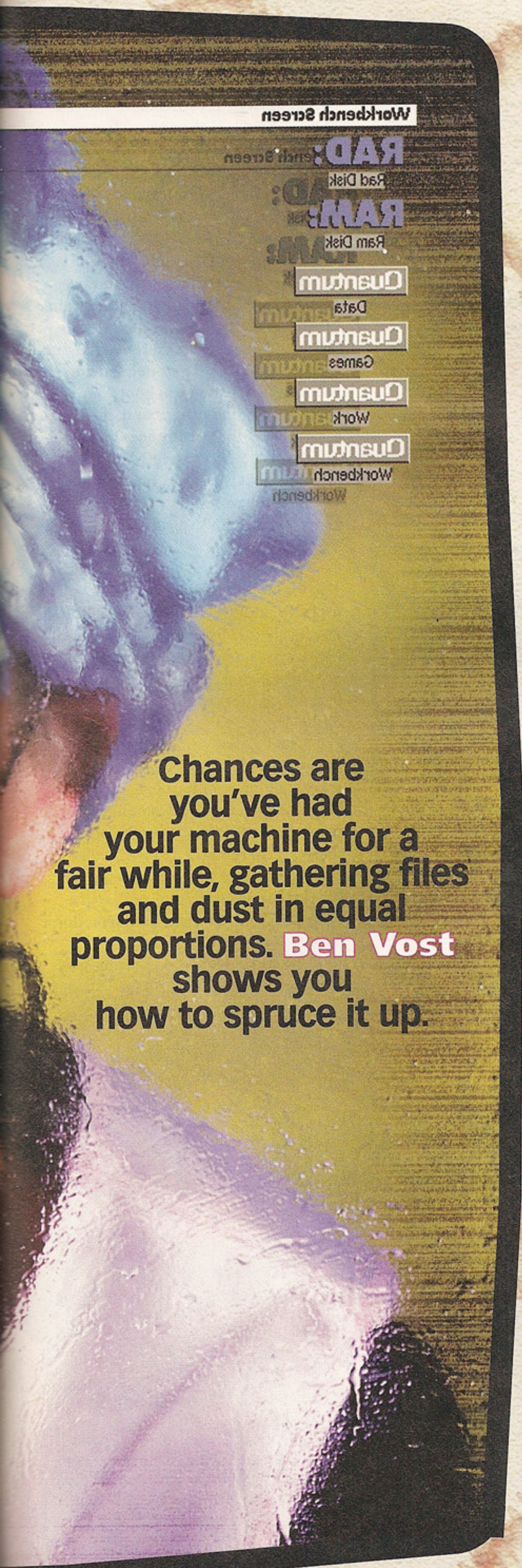
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Please send to: The DEC Hurricane Appeal, 52 Great Portland St, London W1N 5AH.



It's time for a Spring Clean





Chances are you've had your machine for a fair while, gathering files and dust in equal proportions. Ben Vost shows you how to spruce it up.

The Amiga is a versatile computer. You can add new programs to it almost every minute of the day, making your machine better and better. Unfortunately, since you won't have infinite hours in the day to play with all these new things you've put on your hard disk, nor will you have unlimited space to store them, you'd better get savvy about getting rid of stuff on your machine too.

The most important thing to bear in mind is that nothing beats a good backup, and it's always worth backing up your machine before you attempt major software surgery on it so you can retrieve lost or accidentally deleted files.

I know that backing up is a bit of a drag, especially if you have no big media like a Zip or a Jaz drive, but it's very useful and a lot easier than trying to recover files after the event.

Cleaning up your hard drive involves looking at several distinct areas to check that you aren't wasting space, and all would benefit from using a file management program of some sort. I can heartily recommend *Directory Opus Magellan*, and will be solely referring to that version (not 4) in the text. However, you can use anything that allows you to make directories, check versions, copy and delete files.

APPLICATIONS

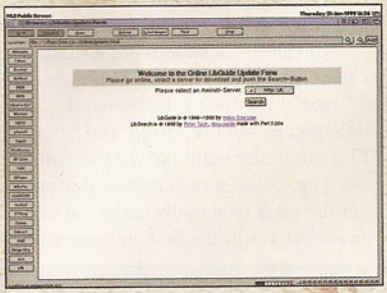
Most applications can be fairly easily disposed of. Even if just deleting their drawer from your hard disk using Workbench doesn't work, it's almost certainly going to be down to an assign or a path statement in your user-startup script. You can get rid of these from your user-startup, but if you're the impatient sort who wants to get rid of drawers and the like without having to reboot to do it, you can open a Shell window and issue the command "assign 'assign_name:' remove". This will get rid of the assign for you so you can go ahead and delete the drawer.

ASSIGNS

If you use *DOpus* or another file manager and you have a lot of programs installed on your hard drive, your assigns list can sometimes be massive. You can prevent this to a certain extent by adding a "defer" to each assign line to stop it from showing up in an assigns list before it gets used by the program in question.

LIBRARIES, DEVICES AND DATATYPES

These used to be something of a nightmare to keep updated, until Heiko Schröder came up with *LibGuide* and swiftly followed it with *DTypeGuide* and *DevGuide*. These three handy bits of software not only allow you to look up library names to check what they do, but they also let you know just what's up-to-date and what's not and where to get new versions from.



The Libs, DataTypes and Devs guides all allow you to update your system online.

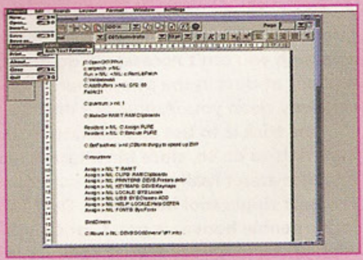
Continued overleaf ➡

SCRIPTS

The two most important scripts on your hard drive will almost certainly be your user-startup and startup-sequence, both of which can be found in the S: drawer of your boot drive.

If this is confusing you already, the boot drive is the one that loads your Amiga up when you turn it on and is commonly referred to as SYS:. The S directory in SYS: can be found by simply "showing all files" in the Workbench icon menu since it doesn't have an icon. You shouldn't need to reference it in normal everyday use of your machine.

Now, script editing? Well, it's the same as writing a letter really, with the exception that there's no need for fancy formatting of any kind. You can even do it in your word processing package if you feel more comfortable doing that, although a dedicated text editor is usually faster and quicker to load. The only caveat if you're going to use a word processor is that you *must* save your script file out as plain text or ASCII. There should be an option in the save requestor for that. Finally, in AmigaDOS the remark character is ";". This means that your Amiga will ignore anything coming after that semi-colon in the same line so you can annotate what you're doing so you know what's going on.



Editing can be done in any word processor. We're using *AmigaWriter*, but remember to save as ASCII.

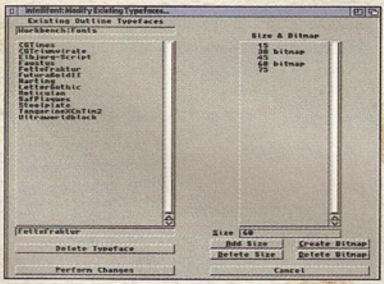


FONTS

Fonts are one of those things that you really do want a file manager for. If you have one of those old-fashioned ones that only allows you to have two windows, it's well worth your while to put the fonts: directory in both and use one for selecting the directories and one for selecting the matching .font files so you don't forget them.

CGFonts are slightly more tricky and you can end up with "bits" of fonts littering your FONTS: dir like so much tumbleweed. The important thing to remember with CGFonts is that they're made up of several parts. They may also have bitmaps which will be stored in a directory, as with bitmap fonts.

You should also look for a drawer called "_bullet_outlines". This contains a ".type" file which will also need deleting, as will the ".font" and ".otag" files out in the main part of the Fonts: dir. The easiest way to ensure that you get the lot is to actually make use of *Intellifont*. It's in the System drawer on your Workbench. You probably won't have made much use of it, but it's still handy for dealing with CGFonts. It can create bitmaps for regularly used sizes and can also be used to select all those pesky files and delete them if need be.



Intellifont is easy to use and quite handy to have when you're clearing up.

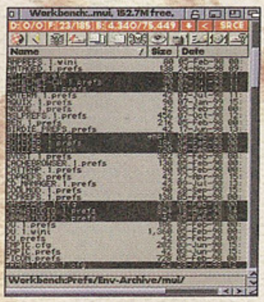
ENVARC

Envarc: is probably the directory that gets the most abuse on your hard drive. It seems like the software world and his wife like to dump settings files and preferences in there with nary a comment and it slows down your boot process. We're not talking about masses of files here, nor a major investment in memory every time you boot – I only have about 200K worth of files in Envarc: in about 150 files. If your hard drive is to be as spotless as Aunty Muriel's china doll loo roll holder, you'll want to apply some cleaner in here.

> **"If your hard drive is to be as spotless as Aunty Muriel's china doll loo roll holder, you'll want to apply some cleaner..."**



Are you sure you need the entire contents of your ENVARC: drawer? I'm sure I don't.



First things first. Look for directories with program names you remember deleting from your hard drive months ago and get rid of them. Next, go through the files at the root of the ENVARC: dir. Most of them will be text files – if you're sure, you can delete them. If not, leave them where they are as they don't take up much room. Keep trawling until you've got rid of everything that you're sure of.

The next thing is to ensure that you use ENV: as little as possible. In case you're not clear on the relationship between ENV:, ENVARC: and the rest of your machine, the answer is simple and rather elegant.

The idea is that ENVARC: sits on your hard drive. When you boot your machine, it all gets copied to a directory in RAM: called ENV:. This directory gets used most of the time when programs are looking for preference files and the like. If you use a program in your Prefs drawer and you select "Use", it still saves a preference file, but only to ENV: which gets deleted and recopied every time you boot your machine. On the other hand, if you select "Save" the preferences file gets saved to both ENV: and ENVARC:, meaning that when you reboot your machine the preference you've just set gets copied to ENV: again.

HAPPYENV

The tool to use to make sure that you use ENV: as little as possible is a little patch called *HappyEnv*. It works by only copying to a new ENV: files that are actually needed there. This results in faster boot times and speedier retrieval of files from ENV:

There are two more things to know about ENV:/ENVARC:. The first is that there's a drawer in it called "sys". This contains system preferences like screenmode, font and parallel port settings. There's also a drawer called mui (if you have had *MUI* installed), which contains settings for all *MUI* programs. Get rid of the ones you don't have any more.

The second thing is knowing how to make your own

CLEANING YOUR AMIGA

While we've talked about spring cleaning your hard drive, one element we haven't dealt with is actually cleaning the outside (and interior) of your Amiga itself. If you're a smoker or you live in a dusty environment then you'll know how quickly grime mounts up inside your machine, and although you can't necessarily do much about the amount of dust in the atmosphere, you can certainly clean your Amgia out once in a while.

The trick is to use appropriate tools and materials to do so, since Mr. Sheen and a lump hammer aren't really the most suitable for the job. The best single tool has to be a Dust Buster. This rechargeable hoover is great for cleaning out your keyboard and relieving your Amiga's insides of big dust bunnies and should be completely safe within your machine (I've been using one for ages).

The next useful things are both aerosols. One is "anti-static inert foaming cleaner", which comes under a variety of brand names and is available from electronics stores like Maplin and RS. It's great for monitor screens, keyboards and all manner of other surfaces, plus it's good for TVs. The second is a can of compressed air to blow dust from places that are hard to reach with the Dust Buster's big snout.



ENV variables, as they're known. There may well be times when you're asked to do this, so you should know. The easiest way to do it is to create a directory, if need be, and then make a text file in it with the name of the environment variable, as well as containing whatever needs to be contained. For example, in the *DOpus Magellan II* manual it says that you can create an environment variable, "HidePadlock", to hide the padlock gadget in the titlebar of a window. Since *Opus* uses the directory ENV:DOpus to store its variables in, all we need to do is create a text file called "HidePadlock", put a "1" in it and save it to the ENV:DOpus directory.

Environment variables aren't case sensitive so you could have called it "hidepadlock", but the caps make it easier to read. Also, saving it in ENV: will means the next time you have to reboot it will be gone. To make things permanent, save it to ENVARC:DOpus/. If the *DOpus* directory isn't in ENVARC:, just create one there.

ICONS

If you've previously installed an icon set that you've now decided you don't really like, it can be hard to change your icons back to what they were before, or to replace them with other icons, especially if the only tool at your disposal to do so is *IconEdit* or *Iconian*. The answer is to not use an icon editor at all, as obvious as that may seem, and to use a replacement icon information window instead.

SwazInfo is the only choice for WB users. Not only does it allow you to drag and drop icon images and ToolTypes into its window, it also has a wealth of other handy functions, such as being able to stop ToolTypes from working individually and to sort them in order and so on.

You're even better off if you use *Directory Opus Magellan II* since the Icon Information window for that Workbench replacement is an improvement over *SwazInfo*. It handles *NewIcons* well, something that *SwazInfo* isn't very good at, and it allows you to individually set whether an icon has borders or a label or not. This still means you'll have to sit down and go through your icons one by one, though.

If you want wholesale replacement of icons and you aren't happy with either *NewIcons* or *Magic Workbench*, your choices are somewhat limited. There are other icon schemes available on Aminet and elsewhere, but if you simply want to go back to the standard 4-colour icons used by Workbench, you might be best off re-installing it in order to do so. However, be careful since you may well replace newer versions of files with older ones this way.

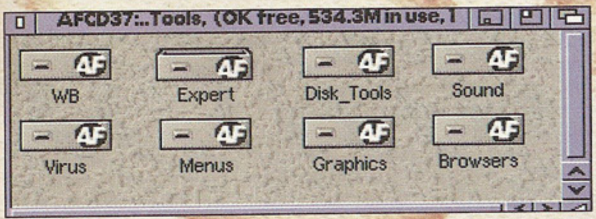
If you choose a user level greater than novice, Workbench's installer script should check with you if something is a later revision. However, this might take just as long as simply copying the correct icons across.

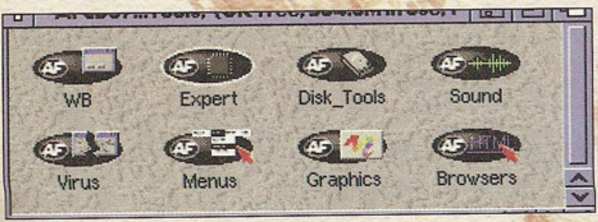
PROGRAMS TO MAKE YOUR LIFE EASIER

ON THIS MONTH'S CD

On the CD, every issue, we have a store of handy tools for you to use. They're always in the +System+/Tools drawer and it's well worth making up a floppy of emergency tools to use if you lose your hard drive. "Pcw" in the chart on the next page stands for Postcardware, where you're expected to send the author a picture postcard of where you live; "Fw" is Freeware – you pay nothing; "Shw" is Shareware where you should pay the fee listed. Also remember that a lot of these programs can be found on the *AFCD*.

> **It's also worthwhile keeping a disk with a list of all your registration codes and all your keyfiles on it...**





Whether you like *MagicWB* or the *NewIcons* style is easy to decide thanks to the flexible way the Amiga handles icons.

STARTING FROM SCRATCH

While we certainly don't recommend reformatting your hard drive in order to get rid of problems, there are occasions when starting from scratch is your only option.

If you don't have a current backup to use in restoring your hard drive (and why not?), your only recourse is to repartition, reformat and restock your hard drive with all those programs you wouldn't want to be without. Obviously, the first things you should get up and running are some kind of *HDToolbox* program, and Workbench.

We recommend that you use Oliver Kastl's *HDInstTools* since it works under a wide variety of versions of Kickstart and has a great many more functions than *HDToolbox* in a familiar interface that's also friendlier than *HDToolbox*'s.

Once you've partitioned your drive how you like it and reinstalled Workbench, you need to get your CD-ROM drive working so you can get access to all the handy tools we keep on the *AFCD*. It's also worthwhile keeping a disk with a list of all your registration codes and all your keyfiles on it in a separate place so that in the event of a crash you won't lose all of them – registration cards are always hard to find when you need them.

CLEARING OUT WBSTARTUP

A lot of people run a lot of commodities they don't have to. It's not their fault, they just end up with a load more stuff in their WBStartup drawer than they need. As an example, look at the WBScreenshots on the CD and then look at the readme that accompanies them. I'm pretty sure you'll know of a single tool that does the job of two or three of the commodities on each list.

Of course, there's the übercommodity, *MCP*, but not everyone likes just how big this thing is, nor how much work you have to do to configure it. That's not to say commodities with a little less ambition can't be worth having – *MultiCX* is one of these.

If you're already using *MCP* happily then you certainly won't want to move to *MCX*, but those of you who are running a simple screenblanker, an opaque windows commodity, something to give you hotkey control over certain functions, an assignwedge commodity, a no click function for your floppies, a *WBGauge* tool and many more, then *MultiCX* will be right up your street.

Personally, I don't use more than about 11 commodities and that includes WBStartup+ and Exchange. My machine boots in much less than a minute because of it, and less than five seconds is taken with the WBStartup+ window on screen.

SPRUCING UP YOUR AMIGA

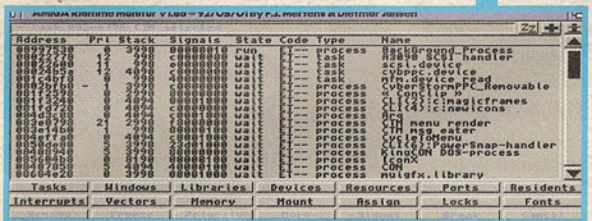
Although looks aren't everything, they certainly go a long way to making people look twice at your machine to see that it's incredibly good-looking and doesn't use Windows. Little cosmetic patches to Workbench can be seen as good things, although I've only stuck to the simpler ones that have no conflicts, as far as I'm aware, anyway.

Continued overleaf ➡



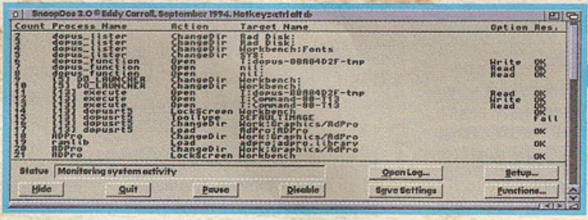
For graphics card users, *Birdie* can help make your windows look very stylish.





ARTM is essential if you want to shut down an errant program, although it can look quite intimidating at first.

A lot of the gizmos included here are for use by graphics card owners, simply because their range of tools is much greater. Sure, you can use a tool like *Birdie* on your AGA machine, but without pumping your graphics output up to 256 colours and thereby reducing the amount of chip RAM you have available for everything else, it can look a bit shabby.



SnoopDOS might look complex, but remember you're only looking for "fails" to start with.

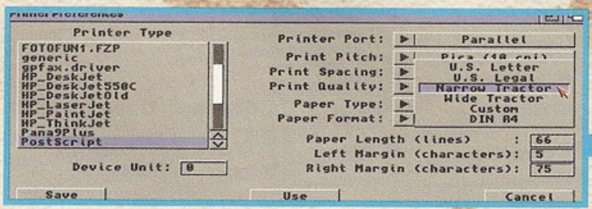
Birdie is actually a good example. It looks fantastic on a 16-bit screen, but put it in AGA and you might have to dither the pattern that fills the title bar of your windows. This not only looks horrible, it also reduces the legibility of your title. As such, getting a graphics card must remain a high priority for all Amiga users, although it'll be out of reach to some because of the expense of getting either a Zorro busboard or a PPC card to plug into a BVision.

With prices for Amigas currently at an all-time low, it's worth scouring MicroMart for a second-hand big box Amiga, something like an A4000, for cheap money. These machines often come with a graphics card and accelerator anyway, offering you the cheapest and safest way of upgrading your Amiga.



A CD filing system is absolutely vital if you want to read our great CDs.

CycleToMenu allows you to use cycle gadgets effectively; *Magic Frames* makes them look nice.



ESSENTIAL SOFTWARE

Directory Opus Magellan II . . . . £49.95. . . . . Compute! 0181 3031800
This is the king of all utilities. Replace your Workbench with it and never look back! See our full review on page 60 for further details.

ValidateWait . . . . Fw . . . . Aminet:util/cli/ValidateWait.lha
Stops your startup-sequence to allow your drive to validate itself.

WBStartup+. . . . . Pcw. . . . . Aminet:util/boot/WBStartupPlus.lha
This is essential. Not only can you use it to start commodities selectively, you can also use it to prevent others starting. Tip: Change the name of the two drawers to just "Enabled" and "Disabled" and change the ToolTypes in the WBStartup+ icon. It's much simpler in the long run.

ARTM. . . . . Shw – 20DM, £6.77 . . . . . Aminet:util/moni/ARTM2_04.lha
ARTM stands for *Amiga Real-Time Monitor* and it allows you to do all sorts of things, from closing down programs that have crashed and closing their windows to altering the priority of certain tasks so they get more or less processor time.

HappyEnv . . . . Pcw . . . . Aminet:disk/misc/HappyENV.lha
This handy tool will speed up your startup no end and save you memory too. Everyone should be using it.

SwazInfo. . . . . Shw – 10US$, £6. . . . . . Aminet:util/wb/SwazInfo18b.lha
This replacement for Commodore's Icon Information window is a godsend if you don't use *NewIcons* and don't have *DOpus*.

ABackup. . . . . Shw – 20US$, £12. . . . . . Aminet:disk/bakup/abackup.lha
Make sure that backing up your hard drive becomes a regular activity with this easy to use backup program.

MCX. . . . . Shw – 20DM, £6.77 . . . . Aminet:util/cdity/MCX280.lha
It's a commodity that does everything! Bin loads of your existing commodities as you replace them with this tool.

OXYPatcher. . . . . £14.99. . . . . Weird Science (0116) 246 3800
This is an essential tool for anyone with an '040 or '060. Even phase 5 product owners should get this since it'll speed up their accelerators more than CyberPatcher does. However, it doesn't work with *Fusion*.

SnoopDOS . . . . Fw Aminet:util/moni/snoopdos30.lha
SnoopDOS is one of those things that we always ask if you use when you call up to complain that a bit of software doesn't work on your machine. It's an essential tool to ascertain what's going on behind the scenes, although it can be a bit daunting. A good tip is to just look for fails – you can set prefs to only report them.

MUI. . . . . 25US$ . . . . http://www.sasg.com
MUI is an essential thing to have, especially if you want to be online since all the best net applications all use it. It's not to be confused with *Magic Workbench* which, although it comes from the same group of Shareware authors, has nothing to do with *MUI*, apart from using the same palette.

NewWPA8. . . . . Fw aminet:util/boot/NewWPA8.lha
This gizmo speeds up chunky pixel writing, making some c2p functions faster and also helping with the graphics speed of your machine.

AmiCDFS. . . . . Shw – 15US$, £9.50 . . . Aminet:disk/cdrom/amicdfs240.lha
To access CD-ROM drives on your Amiga, don't rely on the shabby *CDFS* that Commodore shipped with WB3.1 – get this superior FS instead. You can also get *IDEfix/CacheCDFS* from Oliver Kastl from Aminet, or when you buy a CD-ROM drive or a 4-way adaptor. If you wish to go down the commercial route, *AsimCDFS* from Blittersoft (01908 261466) is superior to the Shareware CDFSes and it offers many more features.

FastiPrefs. . . . . Pcw . . . . aminet:util/boot/FastiPrefsxx.lha
This tool allows for random backdrops on Workbench, can hide the Workbench title bar and can lock the palette, obviating the need for any other palette locking programs like *MagicColours* or *MWB-Daemon*.

MagicFrames . . . . Fw . . . . aminet:util/wb/MagicFrames.lha
If you're running on a 1:1 aspect ratio screen, like a Hi Res Laced screenmode, DblPAL or even on a graphics card, having the double thickness vertical borders on *GadTools* gadgets can look really clunky. *MagicFrames* fixes that and it also allows new gadgets for cycle gadgets.

ToolsDaemon . . . . Fw. aminet:util/boot/ToolsDaemon21a.lha
If you have *DOpus* then you don't need this slightly unsafe patch to give you more menus on Workbench, but otherwise it's well worth having.

CycleToMenu. . . . . Pcw Aminet:util/cdity/CycleToMenu-21.lha
This turns those pesky cycle gadgets into pop-up menus, making them easier to use.

(Pcw – Postcardware, Fw – Freeware, Shw – Shareware.)

netconnect £49.95



program : netconnect
version : v2.2
format : cd-rom or floppy disks
available : yes
price : £49.95
awards : amiga format gold, 96%, cu amiga 94%

The award-winning **NetConnect v2** is the easiest and most comprehensive Internet compilation designed to enable any Amiga user, from novice to expert level, to get onto and use the Internet. By using the new Genesis Wizard, a user should be able to connect to the Internet in a matter of minutes. Containing Genesis, Voyager-NG, Microdot-II, AmIRC, AmFTP, AmTelnet, AmTerm, NetInfo, AmTalk, X-Arc and the Contact Manager. Ideal for both an Internet or local area network connection.

- *Eleven Commercial Programs* - contains the highest quality Internet software, all commercial versions.
- *Truly Integrated* - the beauty of NetConnect v2 is the integration. Contact Manager works with Microdot-II, Voyager, AmIRC and more. Centralised MIME preferences works between all the programs.
- *Flexible Dock Bar* - setup and launch all your software from this advanced and flexible tool bar
- *Aimed Towards Beginners Through to Advanced Users* - NetConnect v2 is simple enough for the beginner to use to connect to the Internet for the first time, but powerful enough for the advanced user who may require a dialup connection and local area network (LAN).
- *Award Winning* - Amiga Format Gold (96%), CU Amiga Superstar (94%)
- *Expandable* - software works with external programs. The Contact Manager works with IBrowse, YAM v2 r7, STFax Professional. Enhanced Genesis features are supported by WebVision, STRicq and more.

stfax professional £29.95



program : stfax professional
version : v3.7
format : floppy disks
available : yes
price : £29.95
awards : amiga format gold, 95%, cu amiga superstar, 95% amiga magazin (DE) 89%, Amiga Plus (DE) 96%

STFax Professional is a commercial fax/voice message program which enables you to use your Amiga as a digital answermachine. Send and receive faxes, create a simple or advanced tree based digial answer system for family members, create a fax on demand service, log numbers via caller-ID, call screen or blacklist phone numbers, setup a mini-BBS, use your modem as a telephone, control other programs etc.

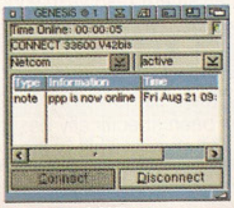
- *Full fax modem support (class 1, 2, 2.0)* - fax from your favourite Amiga software
- *Advanced voice capabilities* - use your Amiga as an advanced (or simple) digital answermachine
- *Support for the PACE Solo, 3-Com Message Plus or Kortex Adaptix Independent Operation mode*
- *Mini-BBS* - setup your own small BBS
- *ScanQuix support* - use ScanQuix to directly scan documents from your scanner into STFax!

Special Offer: Buy NetConnect v2 and STFax Professional together for only £69.95!

genesis £29.95



program : genesis
version : v1.0
format : floppy disks
available : yes
price : £29.95
awards



Genesis is a new TCP/IP stack for the Amiga computer, allowing both dialup Internet access and local area networking, with the advanced facility to run more than one interface at one time (ie. keep your ethernet network connected, whilst putting your dialup connection on and offline - ideal for Siamese users, LAN'ing one or more Amiga's or an Amiga to PC/Unix/etc). ***Genesis*** ships with an easy to use Wizard. Simply enter some basic information about your provider and the Wizard goes online and gathers the advanced information. The status window (shown here) allows you to control the interfaces and shows the connection speed, the time you have been online and which interfaces are connected. ***Genesis*** is supplied with an advanced time and cost logger so you can see how much time you have spent on the net and the costs involved.

amigawriter new £49.95



program : amigawriter
version : v1.1 (english version)
format : floppy disks
available : yes
price : £49.95
awards : amiga magazine (DE) 87% 'very good'.

AmigaWriter is the newest word processor (or word creating) package for the Amiga. Officially ratified by Amiga International, thus supported by the "*Powered by Amiga*" logo, AmigaWriter contains some unique features for Amiga word processors: platform independent (full support for commercial, shareware or freeware plugins), ease of use (easy selection, true WYSIWYG, very Amiga-alike in action), full paragraph control, page formatting, chapter management, support for different image formats and much more. AmigaWriter is almost similar to a DTP program, allowing full box control over text and image placing within your document. All version 1 users will receive the forthcoming PPC version and version 2 free of charge!

- *PowerPC version inclusive in the price* - in development, due in v1.x, available free of charge
- *Flexible box layout concept* - design your pages in true DTP style
- *Support for external image formats* - support for IFF and JPEG and any other image via datatypes!
- *Extensive plugin support* - expect commercial, shareware and freeware plugins
- *Free update to v2 (due 1999)* - postscript/truetype fontengine, spell checking, form editor, table editor and MS Word import filter and much more.

ACTIVE

Oval House, 113 Victoria Road, Darlington, DL1 5JH
Tel : 01325 460116
Fax: 01325 460117
E-Mail: sales@active-net.co.uk
http://www.active-net.co.uk

Delivery Information

S'Ware - £1.00 for UK delivery
- £1.50 for EU delivery
- £2.00 World delivery

H'Ware - £6 for UK next day delivery (serial cards charged at £3 for standard delivery)

Make cheques/P.O.'s payable to Active Technologies and send to the address listed opposite. Credit/debit card payment accepted. For any additional information contact us.

free unlimited internet access new

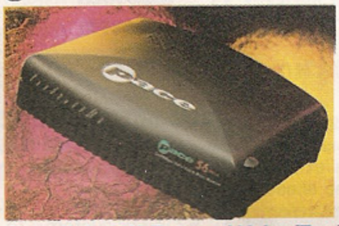
There has never been a better time to connect to the Internet as now it is completely free of charge! That's right: no connection fee, no on going service charge (except for your phone bill) and absolutely no hidden costs. We now provide details on how to connect your Amiga to the top three free-of-charge Internet service providers. These provide full connectivity: analogue and digital (ISDN - FreeOnline only) dialup, free web space (15MB), unlimited email addresses, full newsgroup access and more. Buy software or a modem pack from us and get connected, free of charge, immediately. Call for further information if required.

FREE4ALL
FREEOnline.net
free serve

high quality modems from £69.95

Choose from three high-quality branded modems - the top of the range, award winning PACE 56K, the new PACE 'Solo' 56K or the middle of the range Dynalink 'MagicXpress' modem (well built, compact design, same colour as your Amiga). All ship with a five year warranty. The PACE modem's additional features include free lifetime technical support, UK caller ID (only modem available which supports this), a superb speakerphone andvolume slider/control. All PACE and Dynalink 'MagicXpress' 56K modems are now v90 shipping ready - the agreed standard for 56K connectivity. Why not treat yourself to the brand new PACE 'Solo'? The 'Solo' can be used standalone from your Amiga. Want to go on holiday but need to receive fax and voice messages, but don't want to leave your Amiga running? The 'Solo' is the answer.

pace External 56K Modem



pace 'Solo' 56K Modem



Dynalink 56K External Voice/Fax/Data Modem	£69.95
PACE 56K External Voice/Fax/Data Modem	£119.95
PACE 'Solo' 56K External Voice/Fax/Data Modem	£189.95

modem pack options from £79.95

Various money saving packs are available. These are all based on the Dynalink 56K modem. Packs based on PACE 56K or PACE 'Solo' 56K modems available as an additional cost option.

Code	Pack Contents	£ Prices
PK01	56K Modem & STFax Professional	£ 79.95
PK02	56K Modem & NetConnect	£ 94.95
PK03	56K Modem & NetConnect & STFax Professional	£105.95
PK04	56K Modem & NetConnect, Hypercom1, STFax Pro	£129.95
PK05	56K Modem & NetConnect, Hypercom3+, STFax Pro	£139.95

ADD £40 for a PACE 56K Modem (instead of the Dynalink 56K)
ADD £110 for a PACE 'Solo' 56K Modem (instead of the Dynalink 56K)
ADD £20 for an IOBlix zorro IO card (instead of the Hypercom 3+)

- All packs come with **free**, unlimited Internet connection - three options available
- Choose between the CD or Floppy disk version of NetConnect v2 with your modem pack

home highway - ISDN from £89.95

With the launch of BT's 'Home Highway', ISDN is now affordable for the home user. Our branded Dynalink 'MagicXpress' terminal adaptor enables you to connect to the Internet at blazingly fast speeds (you need a high speed serial card to use ISDN). Various ISDN packs are available:

Code	Pack Contents	£ Prices
ID01	External ISDN Terminal Adaptor (TA)	£ 89.95
ID02	ISDN TA & NetConnect	£114.95
ID03	ISDN TA & NetConnect & Hypercom 1	£149.95
ID04	ISDN TA & NetConnect & Hypercom 3+ zorro card	£159.95

- All packs come with **free**, unlimited Internet connection - one option available
- Choose between the CD or Floppy disk version of NetConnect v2 with your modem pack

high speed serial cards from £39.95

The new ***IOBlix*** card offers 4 high speed serial ports and 1 (2nd port option) high speed EPP/ECP parallel port to your zorro based Amiga. The parallel port offers both uni and bi-directional modes, offering compatibility for all printers. Parallel ZIP™ driver included. The ***IOBlix*** also has a modular interface. Two modules are currently being developed: an AHI-compatible sound card and a SANA-II compatible ethernet card (the ***IOBlix-E***, due soon). The ***IOBlix A1200-S*** offers 1 high speed serial port, the ***IOBlix 1200-P*** offers 1 high speed parallel port. The new ***Hypercom 3+*** offers 2 high speed serial ports and 1 high speed uni/bi directional parallel port.

Model	Machine	Specifications	Price
IOBlix-S	A1200	1 x 460,800bps highspeed buffered serial port	£39.95
IOBlix-P	A1200	1 x uni/bi 500k bytes/sec parallel port	£39.95
Hypercom3+	Zorro-2/3	2 x 460,800bps highspeed buffered serial ports, 1 x uni/bi 500K parallel port	£69.95
IOBlix	Zorro-2/3	4 x 460,800bps highspeed buffered serial ports, 1 x uni/bi 500k parallel port	£89.95
IOBlix-E	Zorro-2/3	Ethernet module for IOBlix zorro IO card	£ call

miscellaneous software

Various other individual software titles are available. These titles may be interesting to those not wanting to purchase NetConnect v2.

	By Disk	By EMail
Scalos - workbench replacer with advanced features	£20.00	£18.00
Voyager Next Generation	£22.00	£20.00
Microdot-II v1.1 (release) - email and news client	£22.00	£20.00
AmIRC	£22.00	£20.00
AmFTP	£20.00	£18.00
AmTalk	£17.00	£15.00
X-Arc - system archive management tool (handles lha, lzx and zip archives)	£17.00	£15.00
Contact Manager - system addressbook, works with many net/comms programs	£12.00	£10.00
AmTelnet + AmTerm Package Deal	£20.00	£18.00

- *5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+*

Latest News in Brief

NEW LOW COST, HIGH PERFORMANCE, APOLLO ACCELERATORS NOW AVAILABLE

Apollo have completely redesigned their range of '030 accelerators making them better value than ever. The Apollo 1230TurboPro Mk3 now features:

- 1 or 2 (optional) simm sockets for up to 64mb memory
- Full memory management unit (MMU) and floating point processor (FPU) as standard
- Mix and match' any simm sizes up to 32mb each when 2 simm sockets are fitted
- Asynchronous bus interface for the fastest possible memory access times
- Remapping of all memory addresses to avoid potential PCMCIA conflicts
- Amazingly low price - just £59.95 or £69.95 with 2 simm sockets.

As an added incentive we are also giving 20% off memory prices when purchased with an Apollo 1230 Mk3 Pro.

SAMPLITUDE-LE & SAMPLITUDE OPUS NOW AVAILABLE

To complement our range of Prelude sound cards the full range of Samplitude multichannel professional sound editing, sequencing and effects software is now available ex-stock from Eyetech. These packages greatly enhance the already impressive sampling, hard drive recording and and resampling facilities available within the Samplitude-SE software supplied with the Prelude1200 and PreludeZ2 sound cards by adding Fast Fourier Transformation (FFT) filtering, Virtual projects (VIP) and high-end mixing and resample algorithms.

FFT is used for high quality filtering, denoising, convolution (attaching one sample's characteristics to another) etc. whilst VIP allows non-destructive editing, mixing etc. on multiple projects using the same base samples - with up to 16 tracks in Samplitude Opus and 4 tracks in Samplitude-LE.

Samplitude Opus is priced at just £149.95 and Samplitude-LE at just £49.95. These prices are reduced by 10% when purchased at the same time as a Prelude1200 or PreludeZ2 card from Eyetech.

HARD TO GET ACCESSORIES FOR BLIZZARD 680x0 ACCELLERATOR CARDS

- We have managed to obtain a supply of single-sided 32mb simms suitable for Blizzard cards which are unable to take conventional double-sided 32mb simms. These are currently available ex-stock at a small premium over double-sided simms. Please ring for the latest prices.
- We now stock SCSI/second simm upgrade cards for Blizzard 1230 Mk4, 1240 and 1260 cards for use with scanners and other SCSI accessories. The adapters are priced at £79.95, or £59.95 if bought in conjunction with an Eyetech scanner bundle.

21MIPS 040/28 APOLLO ACCELERATORS INTRODUCED AT A PRICE LOWER THAN THE 19MIPS 040/25

The entry-level 040 Apollo accelerators from Eyetech has now been uprated to 28MHz/21MIPS. Not only does this boost performance, but also makes the board compatible with most higher speed 72pin EDO PC simms.

Even better, we have managed to reduce the price of the new board to just £124.95!

ULTRACONV 4 - SHIPPING EARLY FEBRUARY 1999

UltraConv 4 - the next generation of this impressive graphics and animation conversion package is expected to be available by the time this issue hits the streets. All customers who have previously ordered UltraConv 3 from us will automatically be upgraded free of charge. The price remains the same as UltraConv3 - £39.95 or just £29.95 when purchased with ScanQuix 4.

A1200 HARD DRIVE 'STARTER' MAGIC PACKS NOW SHIPPED 'CDROM' READY

The hard disk versions of Eyetech's entry-level A1200 Magic Pack System (AMP-STR-HD2) are now being shipped 'CDROM ready'.

These packs are now fitted with an internal buffered IDE interface and an external CDROM data socket. That makes connecting a CDROM - either at time of purchase or later - as easy as plugging in a printer!

Suitable 24x speed external CDROM units (with case and power supply) are available from Eyetech for just £59.95.

BMON - A FAMILY OF MONITOR SWITCHES FOR THE BVISION CYBERVISION & OTHER GRAPHICS CARDS

Following the release of the BVision in late December 1998, Eyetech has completely redesigned its BMon range of high quality video switches to cater not just for the BVision, but for all Amiga graphics cards abd scandoubler/flickerfixer combinations.

The BMon takes two video inputs - one from an Amiga's AA chipset (either directly or via a scandoubler/flickerfixer) and the other from a graphics card (BVision, Cybervision, Picasso, Ateo bus card etc) - and switches your SVGA or multisync monitor between them. The BMon uses high quality video switchers so - unlike conventional switchboxes - there is no loss of quality from either source. It can also be used - in its SMon form - for switching an SVGA monitor between a PC and Amiga system.

As standard the BMon accepts input from a BVision or Cybervision card and from an Eyetech EZVGA internal flickerfixer-2. It is manually switched by a remote miniature toggle switch positioned - for example - on the front panel of a tower system. An optional automatic switch controller is currently under development and can be easily added later.

The BMon comes in a self-contained plastic case (approx 55x50x15mm) and attaches to the back of the case using Velcro strips. It can easily be mounted inside a tower system using any available 15pin 'D' type knock-out on the tower's rear panel.

The BMon is available in six different configurations to suit most graphics card/Amiga video configurations as follows:

AMIGA CHIPSET CONNECTION		23pin D-M RGB	15pin HD-F SVGA	EZVGA INFF-2
GRAPHICS	BVision, CyberVisionPPC	ADPT-VGA-BMON/A	ADPT-VGA-BMON/V	ADPT-VGA-BMON/F
CARD TYPE:	Ateo, Picasso, PC gfx card etc	ADPT-VGA-SMON/A	ADPT-VGA-SMON/V	ADPT-VGA-SMON/F

The BMon, complete with manual change-over switch & indicator and EZVGA INFF-2 connecting lead (ie part number ADPT-VGA-BMON/F) is priced at just £39.95. Please see the price list on page 4 of this advert for other prices.

MK4 EZTOWER - with EZ-Access Removable Side Panels - Now Available

We've just redesigned the highly successful A1200 EZTower system - to make it easier than ever to install and upgrade your A1200 system. The all-new EZTower system adds:

- Independently removable side panels for quick and easy access to your A1200
- The ability to fit oversized PC cards when a PC motherboard is installed
- ATX motherboard socket cut-out options giving you a greater choice of PC/Amiga dual system components (NB the EZTower is shipped as standard with an AT PSU).

The new case design has also been used in our EZTower Z4 - see the news item below- making it the ideal way to expand your A1200 via the Zorro route.

EZTower-Z4

A new version of the EZTower is now available from Eyetech which has been specifically designed for use with the EZBus-Z4 above. This is the way to go if you don't/won't need EZPC expansion capability.

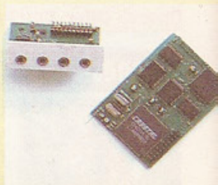
As an introductory offer we are making available some very special EZTower-Z4 and EZBus-Z4 bundles as follows:

- Full EZTower-Z4 with 10 drive bays, 250W psu, floppy drive faceplate & cable, power connectors etc
- EZKey-SE keyboard adapter and PC keyboard
- EZBus-Z4 bus board as above with 5xZorro2, 2x clock port, 2 x Z4 slots, DIY EZTower-Z4, keyboard and keyboard adapter and EZBus-Z4 - normal price just £239.95
- Introductory price for first 100 orders (total) - just £199.95
- Ready-built EZTower-Z4 bundles as above +£20.00
- Upgrade to Amiga keyboard & keyboard adapter +£20.00

Tele-Sales & Mail Order Enquiries
+44 (0)1642-713-185 - 07000 4 AMIGA
sales,info@eyetech.co.uk www.eyetech.co.uk

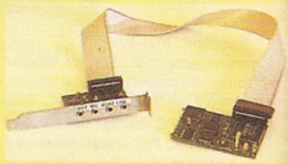
COMPREHENSIVE FITTING KITS FOR EXPANDED A1200s NOW SHIPPED WITH TOWER VERSIONS OF THE PRELUDE1200s

The response to the UK launch of the Prelude 120 by Eyetech has been overwhelming. Although origi nally designed for A1200 desktop console fitting, was soon obvious that many Prelude 1200 pur chasers wanted to fit their new cards into towered-u A1200s - many already highly expanded.



Two popular accessories in particular - the Elbox IDE Flyer (also sold under the Power Flyer and Winner Flyer names) and the BVision card from Phase 5 - both intrude on the A1200' clock port connector's real estate - preventing the Prelude1200 from being cor rectly positioned. To overcome this problem we hav had some Prelude 1200s specially manufactured wit ribbon cable headers (instead of clock port sockets) Eyetech is supplying these complete with clock por ribbon cable and board fixings so that the Prelud 1200 can be suitably positioned so that it and IDE Flyer/BVision can co-exist. In addition, we have ha brackets specially manufactured which allow th Prelude1200 card's input/output connectors to be fit ted into a standard card frame slot on any Amig tower. These brackets, pin-header Prelude120 boards and ribbon cable are now included as stan dard with the tower version of the Prelude1200 - par reference INT-AUD-PL12-TW - costing £144.95.

For users of A1200's without Bvision or IDE-Flyer who have access to the unused blanking plate nex to the mouse port (ie not towered or in an Eyetec EZTower) the direct clock port fitting Prelude 1200 - (part INT-AUD-PL12-DT) is available at just £129.95.



EZBus-Z4 - Available February 1999

A new Zorro adapter is now available from Eyetech featuring regular Z2 slots and 2x 19MB/s local bus connectors:

- 5 x Zorro 2 slots
- 2 x clock port connectors (4 optional)
- High speed Z4 local bus connector with 19MB/s bandwidth (ie twice as fast as Zorro 3)
- Industry standard mounting profile - fits the new EZTower-Z4 (see above) as well as most other popular A1200 tower systems.
- 1 x video slot (requires optional video adapter)
- Low cost high performance, Z4 IDE flyer
- Low cost Z4 4MB, 24 bit graphics card (available shortly)

Zorro-4 adapter alone	£149.95
Introductory price for first 100 orders - just	£129.95
Scandoubler/flickerfixer/video adapter	£29.95
24-bit local-slot graphics card	£ T.B.A.

NEW EZPC A1200 TOWER EXPANSION CONFIGURATIONS

3 new pre-configured systems to suit different applications and pockets

The EZPC system works by making the PC motherboard act as a slave processor to your A1200 - looking after the operation of the systems accessories whilst you and your Amiga get on with creative work. (You can of course use the PC as a computer in its own right if you really insist!)

It's also important to understand that EZPC A1200 expansion system is based on a real Amiga and is not at all comparable with other PC-only systems running a clever, but slow, Amiga emulator as a PC application.

In fact there are such a range of applications that the EZPC system can open up to an Amiga user that we have introduced three systems pre-configured for different types of use. These are:

A1200 EZ-PC TOWER-HSE (Home Studio Edition). £999.95

The HSE configuration comes complete with TV tuner with cut-and-paste teletext facilities, 24-bit video frame grabber and video clip capture card, 30 bit colour scanner, 56K modem and unlimited internet access at local call rates - as well as the standard EZPC system components

A1200 EZPC TOWER-DVE (Digital Video Edition). £1369.95

The DVE is fitted with a purpose-designed, hardware-based MJPEG non-linear video editing suite for home/semi-professional video production. It also comes with built-in CD Writer/ReWriter (with drag-and-drop CD writing software) for producing your own audio and video CDs.

A1200 EZPC TOWER-XLS. £1995.95

This must be the ultimate creative multimedia expansion platform for your A1200. It comes equipped with non-linear video editing hardware and software, A4 30-bit flatbed scanner, DVD ROM hardware & MPEG 2 decoder (for DVD video playback), CD ReWritable drive, 15" Colour Monitor, 56k data/fax/voice modem with voicemail and internet software - and much more.

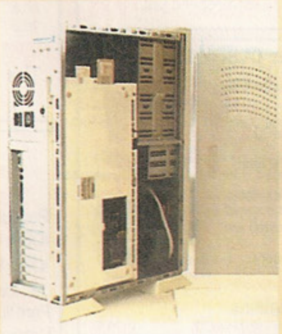
A1200 EZPC TOWER-3.1+. £395.95

Finally, if your A1200 is feeling a bit tired we can supply your chosen EZPC Tower system with a brand new Kickstart 3.1 A1200, complete with Magic Pack software, 24 Speed CDROM, 2.1 GB hard drive (with W/b & Magic Pack software preinstalled), EZCD Mk4 interface and EZIDE software ready installed and connected up. All you need to do is to slot in your existing accelerator, fit your old hard drive into the external mounting drawer provided (see photo) switch on and start using your new A1200 EZPC Tower system.

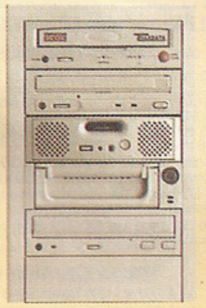
All these three packs are designed for you to fit your existing A1200 in the EZPC Tower and connect it up. This normally takes around an hour, but if you would prefer to receive your system ready to use, we can arrange to collect your Amiga, do the work for you and ship your new system back all ready to plug-in to mains and phone outlets! Please ring for details.

EZPC-Tower Model	HSE	DVE	XLS
EZPC-Tower/250W psu/PC mouse/HD floppy	Yes	Yes	Yes
EZ-Key k/b adapter PC k/b & rem switch	Yes	Yes	Yes
Ultra DMA hard drive 4.2GB	Yes	Yes	Yes
DVD-ROM(inc 20xCDROM)/CDROM	32x CDROM	32x CDROM	DVD-ROM
CDReWriter(inc 6xCDROM) & s/w	n/a	Yes	Yes
10 x blank CDR's 650MB	n/a	Yes	Yes
100Mhz bus PC m'board w/64MB	Yes	Yes	Yes
High perf high res 3D Gfx card w/MPEG-1	Yes	Yes	Yes
TV/teletext/framegrabber	Yes	n/a	n/a
Hardware MJPEG Video Editor	n/a	Yes	Yes
Hardware MPEG-2 Video decoder	n/a	+£59.95	Yes
CD-quality sound card with MIDI	Yes	Yes	Yes
Software controlled Amiga/PC audio mixer	Yes	Yes	Yes
Internal 60W PMPO monitor speakers	Yes	Yes	Yes
Siamese RTG2.5 software	Yes	Yes	Yes
Amiga PCMCIA & PC ethernet cards/cabs	Yes	Yes	Yes
30-bit high res A4 flatbed scanner	Yes	+£59.95	Yes
Internal 56k data/fax/voice modem	Yes	+£99.95	Yes
Unlimited access Internet package	Yes	inc w/above	+£49.95
15" SVGA monitor	+£109.95	+£109.95	Yes
17" SVGA monitor	+£199.95	+£199.95	+£99.95
Win 9.x/Lotus Smartsuite bundle	+£99.95	+£99.95	Yes
Miami Amiga TCP/IP stack	+£24.95	+£24.95	Yes
75%-off Cinema-4D/PC voucher	Yes	Yes	Yes
Cost with options as specified	£999.95	£1369.95	£1999.95





The EZPC Tower system showing the A1200, the PC rear sockets and card slots and removable side panels



1200 Magic Packs

Direct to Eyetech from Amiga International Inc.



- Full UK specification with Kickstart 3.1/Workbench 3.1 disks and manuals.
- UK PSU, mousemat, TV lead and 2mb graphics memory (in addition to any memory expansion included in the packs below).
- Fantastic software bundle including Wordworth 4SE, Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz.
- Hard drive versions come with Scala MM300 pre-installed.
- Other options available, eg EZ-Tower Magic Pack bundles from £338.95 - ring for details.
- Time-of-purchase upgrade packages available at very special prices - see asterisked* items in the 'Pack' boxes below.

Eyetech Starter Pack & Starter Pack-Plus

Diskette based system as above — Just £179.95
CDROM-ready, 170MB HD system as above — Just £248.95
(New! HD pack now includes EZCD buffered i/f and ext'l CDROM socket)
*Upgrade HD systemto a 24-speed CDPlus unit with PSU for just £59.95**

Eyetech Productivity Pack 3

170MB HD,030/33MHz/MMU/FPU/8MB — Just £299.95
*U/g to an '040/25MHz/MMU/FPU w/16MB & 100W PSU for just £99.95**
*&/or upgrade to an EZTower-Plus with EZKey & PC k/b for just £110.00**

Eyetech MiniTower Pack 3

2.5GB HD, '040/25MHz/MMU/FPU/16MB, 24-speed CDROM, EZ-CD-Mk4 4-device buffered i/f & cables, EZIDE s/w, MiniTower case with 230W PSU — Just £598.95
*Upgrade to an '040/40-SE/MMU/FPU with 32MB for just £69.95**

Eyetech Professional Pack 3

4.3GB HD, '040/40-SE/MMU/FPU/32MB, 24-speed CDROM, EZCD-Mk4 4-device buffered i/f & cables, EZIDE software, EZTower case, Amiga k/b & i/f, 250W PSU — Just £798.95
*Upgrade to a 160MHz PPC & '040/25MHz/MMU/FPU w/64MB for £129.95**
*... &/or add a 14" Monitor & Scandoubler for just £129.95**

The New Eyetech Mk 4 EZTower System - from just £79.95 - or £99.95 including keyboard & keyboard interface

Thinking of towering up your A1200? Then you should certainly be considering the unique Eyetech EZTower System

"This is definitely one of the easiest solutions to building your own Tower" - *Amiga Format*

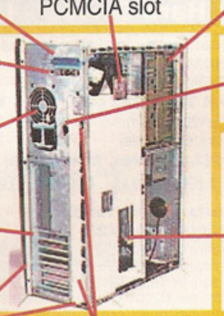
"The Eyetech Tower offers clever solutions with a Velcro easyfit mentality" - *CU Amiga*

- ✔ **The easiest way to re-house your A1200 by far**
- ✔ **Expand your system with EZPC or Zorro slots**
- ✔ **250 W PSU with PC and Amiga power connectors**
- ✔ **Available in 5 models to suit different skills and budgets**
- ✔ **The only tower allowing both PC & A1200 in one case**

	Backplate kit	DIY* EZTower	Full EZTower
DFO: face plate & ribbon cable	Yes	Yes	Yes
Custom backpanel w/SCSI, audio KOs	Yes	Yes	Yes
A1200 power & LED adptrs	Yes	Yes	Yes
CE-approved metal PC case	n/a	Yes	Yes
No of bays/PSU capacity	n/a	9/250W	9/250W
Directly accessible PCMCIA slot	Yes	Yes	Yes
DIY assembly instructions	Yes	Yes	n/a
Installation instructions	Yes	Yes	Yes
PC board/Siamese compatibility	Yes	Yes	Yes
Assembled & A1200-ready	No	No	Yes
Eyetech installation option	No	No	Yes
Cost with options as specified	£39.95	£79.95	£99.95
With EZKey2/PC k/b (w/A4k k/b+£20)	n/a	£99.95	£119.95

*With the DIY EZ-Tower you have to remove the PC tower back panel and some internal shelving and fix the new back panel in place

* Optional extra not included in standard EZTower system



AMIGA SVGA MONITORS

For use with Amiga Zorro & the new PPC Graphics Cards, Scandoublers & the EZPC-Tower system



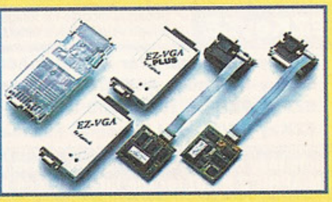
- ✔ All monitors come with a 3-year warranty.
- ✔ Special pricing on scandoublers/flickerfixers bought with monitors from just £45 extra
- ✔ Monitor specifications are quoted as the highest vertical refresh rate at the maximum resolution. Higher refresh rates (>=72Hz) at lower resolutions are available and give a more visually relaxing display.
- ✔ Scandoubler/flickerfixers have resolutions governed by the Amiga's AA/AGA chipset and are restricted to a maximum vertical refresh of 73Hz and a maximum usable resolution of 724Hx566V.
- ✔ The PPC BVision supports 1600x1280@72Hz. You will not gain the full benefit of this superb graphics card without a monitor that supports this resolution at that refresh rate.

14" SVGA 0.28DP, 1024Hx768V	@ 60Hz	£89.95
15" SVGA 0.28DP, 1024Hx768V	@ 60Hz	£119.95
17" SVGA 0.28DP, 1280Hx1024V	@ 60Hz	£209.95
17" SVGA 0.26DP, 1600Hx1280V	@ 75Hz	£399.95

EZVGA Scandoublers & Flickerfixers from just £48.95

All scandoublers/flickerfixers allow the Amigas 15Khz modes to display on a PC SVGA monitor. Flickerfixers allow interlaced screens to be displayed, rock-steady, at twice the standard vertical resolution. Other modes are passed through unaltered.

EZVGA-Mk2	Compact, external, upgradable scandoubler (to full flickerfixer)	£69.95
EZVGA-Plus	Compact, external scandoubler with full flickerfixer	£99.95
EZVGA-SEFF	Economy external scandoubler with full flickerfixer	£89.95
EZVGA-INSD	Internal A1200/A4000 scandoubler (not upgradeable)	£48.95
EZVGA-INFF	Internal A1200/A4000 scandoubler with full flickerfixer	£78.95



Peripherals & Storage

AWARD-WINNING UMAX SCSI FLATBED SCANNER



- ✔ 600 x 300dpi optical resolution, single-pass 24-bit A4 flatbed scanner
- ✔ Comes with Photoscope (Amiga) and Mac software. Compatible with all modern SCSI interfaces - including PPC, Blizzard & Classic Squirrel (but not Surf-Squirrel)
- ✔ PCW 'Best Scanner of 1998' Award - July 1998; PCW 'Best Scanner' September 1998
- ✔ Highly-acclaimed ArtEffect-SE v1.5 (normally £59.95) free with this bundle whilst stocks last . . . .

Amiga UMAX Scanner & PhotoScope Bundle now with FREE ArtEffect-SE v1.5 - still just £179.95

The Top-Rated CD-Plus Range for the A1200

"Eyetech have come up with a real winner with this new CDROM drive" - Ben Vost, AF

If your A1200 hasn't got a CDROM then you don't know what you're missing!

At these prices there is really no excuse!



- ✔ Whisper quiet 24 or 32-speed CDROM mechanism
- ✔ EZCD-Mk4 4-device buffered interface, 3-connector 40-way and 2-connector 44-way cables included
- ✔ CDPlus driver software specially written for Eyetech by the author of IDE-fix
- ✔ Optional Amiga and CDDA audio mixer with Gold phono audio jacks - just £14.95 each
- ✔ 20-watt CE-approved PSU complete with 13A plug.
- ✔ Optional upgrade to MiniTower or Desktop case with 230W PSU (which can also hold extra drives and power your Amiga) just £20 extra!
- ✔ 2 Free CDs whilst stocks last

lower prices

Complete CDPlus Systems: 24-speed just £74.95; 32-speed just £84.95!
Bare mechanisms for tower: 24-speed just £39.95; 32-speed just £44.95!

A1200 EZWriter and EZReWriter CDROM Burners

Make your own music and data CD's, back up data for less than 0.15p/MB . . .

lower prices



- ✔ Both are IDE/ATAPI reader/writer units with MakeCD Amiga writing software
- ✔ EZWriter units cut 'Gold' CD blanks at 2x speed & read CDROM's at 8 speed
- ✔ EZReWriter units cut 'Gold' CD blanks and CD rewritable disks at 2x speed and read conventional CD's at 6 speed
- ✔ Gold 650MB CD blanks (for use with either model) are available at ten for £10 at time of purchase
- ✔ CD rewritable disks are just £5 each when bought with the EZReWriter

EZWriter Internal

EZWriter/EZReWriter Options

EZWriter-Bare	for A4000 or A1200 Tower (bare drive - no MakeCD)	£179.95
EZWriter-INT	for A4000 or A1200 Tower (with MakeCD)	£209.95
EZWriter-SE	External A1200 unit with separate 100w PSU	£249.95
EZWriter-Gold	External A1200 unit with int 40w PSU, Gold Audio skts	£279.95
EZWriter-MT	Mini-Tower-cased unit with 230w PSU which can house an additional LS120/Zip/CDROM & power your A1200	£269.95
EZReWriter-Bare	for A4000 or A1200 Tower (bare drive - no MakeCD)	£199.95
EZReWriter-INT	for A4000 or A1200 Tower (with MakeCD)	£229.95
EZReWriter-SE	External A1200 CD ReWriter with separate 100w PSU	£279.95
IDE interfaces	EZCD-SE I/F, 44-way & 40-way cables & CDROM s/w -	add £20
if required . . .	EZCD-Mk4 I/F, 44 & 40-way cables & EZ-IDE s/w -	add £30
	IDE-Flyer or IDE-Express I/F, cables & s/w -	add £50

A1200 Hard Drives - LS120, ZIPs

- ✔ All drives come ready to use with WB3.0 pre-installed & WB2.x install script
- ✔ All drives over 200 MB come with over 45 top quality utilities (not shovelware) and MMe multimedia authoring s/w pre-installed, configured & ready-to-run

LS120 & Zip Drives (ATAPI i/f & EZIDE needed)

LS120 (HD Floppy/120MB Cart)	- £79.95	3 x 120MB carts	£29.95
Zip Drive (Mac emul. compatible)	- £79.95	3 x 100 MB carts	£29.95

TowerDrives (3.5" drives, 25mm high)

2.1GB - £89.95 3.2GB - £109.95 4.3GB - £129.95



2.5" InstantDrives for the A600/A1200/SX32

20MB	Entry-level drive for the SX32/A600	£29.95
170MB	Entry-level drive for the SX32Pro/A1200	£49.95
260MB	Entry-level drive for the SX32Pro/A1200	£59.95
720MB	A drive for serious A1200/SX32 Pro users	£99.95
1.4GB	A high performance drive for power users	£129.95
1.8GB	Top-class drive for the A1200/SX32Pro	£149.95

lower price

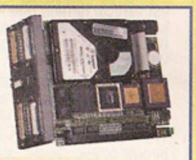
EZGen Amiga Genlock



- ✔ Superimposes Amiga-generated graphics on a composite PAL video stream. Just plug in and go!
- ✔ Substitutes incoming video for any 'transparent' colours in your paint package, titling or multimedia presentation software.
- ✔ Create stunning transition and titling effects with packages such as Scala MM300 (which is included with A1200 hard drive Magic Packs).

Now just £69.95

Turn your CD32 into an A1200!



- ◆ All models come with keyboard, hard & floppy drive, serial, parallel, RGB & VGA video interfaces
- ◆ Pro models have '030 40MHz or 50MHz cpu and optional PC keyboard i/f. Pro-50 has full MMU.
- ◆ Mk2 takes up to 8MB & FPU; Pro models take up to 64MB & FPU.

The SX32 Pro-50

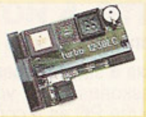
SX32 Mk2 £149.95
SX32 Pro50 £249.95 SX32 Pro40EC £199.95

Accelerators & Interfaces

Apollo Accelerators for the A1200

NEW

1230/40 TURBO PRO MK3*



with MMU, FPU & 1 SIMM socket only £59.95
with MMU, FPU & 2 SIMM sockets only £69.95

A1240/28	'040/28MHz/MMU/FPU*	(21 MIPS)	£127.95
A1240/40SE	'040/40MHz/MMU/FPU*	(30 MIPS)	£167.95
A1240/40	'040/40MHz/MMU/FPU*	(30 MIPS)	£184.95
A1260/50	'060/50MHz/MMU/FPU*	(39 MIPS)	£264.95
A1260/66	'060/66MHz/MMU/FPU*	(51 MIPS)	£349.95

*To 32MB. Optional 2nd simm socket (tower only) offers 64MB total

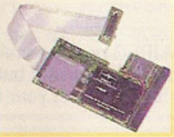
The Apollo A1260/66 is the fastest Operating System-supported Amiga accelerator currently available

Tip: Buy your memory with the accelerator to ensure full compatibility

20% off memory prices when bought with an Apollo or phase5 accelerator

phase5 PowerUp A1200 PPC + '040/'060 Accelerators

Without SCSI (not upgradable) inc. MMU & FPU



160 MHz 603e PPC	'040/25/MMU.FPU	only £199.95
160 MHz 603e PPC	'060/50/MMU/FPU	only £479.95
240 MHz 603e PPC	'040/25/MMU.FPU	only £319.95
240 MHz 603e PPC	'060/50/MMU/FPU	only £549.95

Add £69 to the above prices for factory fitted on-board Fast SCSI II interface

Blizzard Vision PPC 8MB Graphics Card

Unbelievable quality and speed - 1600x1280@72HZ!
No Zorro slots needed!

NEW! 8mb card - £159.95 or just £139.95 with a PPC

The fastest, most highly specified graphics card you can buy for your A1200

A1200 Clock Port Expansion Cards

For non-Zorro expansion A1200 owners the best expansion route is via the (unused) clock port

PortJunior	1x 460kb serial port	39.95
IOBlix1200S	1x 1.5 MB/s serial port	49.95
IOBlix1200P	1x EPP parallel port	49.95
(Drivers for PC parallel port scanners, Zip drives etc., available shortly)		
PortPlus	2x460kb ser & 1x800kb par port	69.95
Catweasel-2	HD Amiga/PC floppy controller	49.95
Prelude1200-DT	16-bit f/d sound card for desktop A1200	129.95
Prelude1200-TW	16-bit f/d sound card for tower A1200	149.95
ClockUp	4-way clock port expander	19.95

Complete A1200 IDE solutions . .

Abridged Guide to Buffered Interfaces

A buffered IDE interface is essential if you are considering expanding your A1200's storage capability. Not only does it give you the option to attach up to 4 hard drive/CDROM/LS120/Zip etc devices but it also protects your A1200 by putting back the buffering electronics that Commodore/AI left out of the A1200 design. Some interfaces can also significantly speed up the data transfer to and from your hard drive and/or CDROM ... but you will need to choose the right interface for your particular setup - see below, ring for details or send a stamped addressed envelope for an IDE Interface Fact Sheet. Note that the EZCD-SE is equivalent to the 'standard' interface offered by some other suppliers. See also the EZIDE software panel on this page.

Interface	Max Xfer	Suitability
EZCD-SE	2MB/s	68030/40Mhz or slower / no accelerator.
EZCD-Mk4	3MB/s	68030/50, 68040/xx, 68060/xx accelerator.
IDE-Express	5MB/s	040/xx, 060/xx, UDMA HD & 24 speed+CDROM
IDE-Flyer	8MB/s	040/xx, 060/xx, UDMA HD & 24 speed+CDROM

EZCD Buffered Interfaces	SE	Mk4
4-Device Buff Interface & CDROM Software	£18.95	£28.95
CDROM s/w, 3x40 & 2x44-way cables	£28.95	£38.95
EZ-IDE s/w, 3x40 & 2x44-way cables	£38.95	£48.95
Elbox IDE Flyer I/F& CFDM file system (>4.3GB HD Support)		£54.95
IDE Express Interface & IDE-fix Express Software		£49.95



EZKey2

- ✔ Autodetects and remaps Amiga & PC keyboards
- ✔ Plugs directly into the ribbon cable slot on the A1200

EZKey2 alone - for A1200 only - just	**£28.95**
EZKey2 and Windows keyboard	**£38.95**
EZKey2, A4000 k/b & 6-to-5 pin adapter	**£58.95**

EZKeySE

- ✔ Separate models for Amiga & PC keyboards
- ✔ Amiga version & k/b detects all multi-key combinations

EZKey-SE/Amiga - for A1200 & A600 - just	**£18.95**
EZKey-SE/Amiga A4K k/b & 6-5 pin adapter	**£38.95**
EZKey-SE/PC - for A1200 & A600 - just	**£24.95**
EZKey-SE/PC and Windows keyboard	**£34.95**

Software & Drivers

TurboPrint 6 & 7* - The essential partner for your digital imaging work



- ✔ The most comprehensive, fastest replacement printing system for all WB2.x+ Amigas
- ✔ Supports more than 70 printers including the latest models from Epson, Canon, HP printers - including the Award-winning Epson Stylus Photo series
- ✔ Integrates seamlessly with ScanQuix scanning software and CamControl digital camera software
- ✔ Poster printing, image tiling, colour correction, print spooling, multiple copies*, postscript emulator*, screen grabber*, photo optimisation etc, all included
- ✔ Selectable parallel device for use with high-speed interfaces such as the PortPlus & IOBlix1200P
- ✔ 20% off the price of the PortPlus & IOBlix1200P when purchased with TurboPrint.

TB6 - £34.95
TB7 - £38.95
6 to 7 u/g - £19.95

Amiga Digital Imaging Software from Andreas Gunther

ScanQuix4 Software just £59.95 - Upgrades just £29.95



- ✔ 24 bit scanning with full range of editing options.
- ✔ Stand-alone use or integrates with your Art package (AdPro, ArtEffect, PPaint, Photogenics, ImageFX, XLPaint, Pagestream 3, DPaint5) via AREXX.
- ✔ 'Scan-to-disk' option in Jpeg or IFF.
- ✔ Unique calibration program which automatically compensates for scanner and printer deficiencies allowing photo-realistic output on any high resolution, Turboprint or StudioII supported, colour printer.
- ✔ Interpolated resolutions to 20000x20000 dpi.
- ✔ Colour photocopy option when used with a one-pass colour scanner
- ✔ Supports Epson, HP, Umax, and some Mustek & Artek SCSI scanners & Epson parallel scanners.(Umax ScanQuix4 is £69.95, Photoscope £59.95)
- ✔ Compatible with all modern SCSI controllers including PPC, Blizzard & Classic Squirrel (but not Surf-Squirrel).

CamControl Amiga Digital Camera Software - now just £29.95



- ✔ Serial connection versions available for most popular models of Kodak, Minolta, Olympus, Casio & Fuji digital cameras
- ✔ Picture transfer, camera control & sideshow options (camera dependent)
- ✔ Stand-alone use or integrates with your Art package (AdPro, ArtEffect, PPaint, Photogenics, ImageFX, XL Paint, Pagestream 3, DPaint 5) via AREXX
- ✔ Selectable serial device for use with high-speed interfaces like the PortJnr or IOBlix1200S
- ✔ 20% off the price of the PortPlus & IOBlix1200S when purchased with CamControl software.

EZIDE - IDE/ATAPI enhancement software

Probably the only hard drive/CDROM/LS120/Zip/SyQuest software you'll ever need

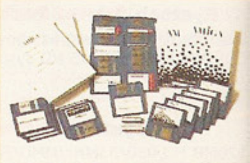
- ✔ Supports LS120, Zip, Jaz, SyQuest, and other IDE/ATAPI removable cartridge drives AUTOMATICALLY. Cartridges just appear on the Workbench when inserted and disappear when ejected - just like a floppy disk. IDE ZipPrep tools are also included.
- ✔ Optimises hard disk performance automatically. Supports 'second channel' hard drives on most 4-device buffered interfaces.
- ✔ Extensive CDROM support including multidisk changers, CD32 emulation, high performance Mac, PC & Amiga CDROM filesystems, multisession and multivolume CDROM support.

EZ-IDE Amiga IDE, ATAPI, CDROM & removable media driver s/w	£34.95
If bought with any EZCD, I/F, Zip or LS120 Drive	£9.95
Upgrade from Eyetech CDPlus/IDE Fix software*	£14.95

(*trade in & proof of purchase required)

Amiga Magic Upgrade Packs available in limited quantities

The ideal way to update your Commodore A1200:



- ◆ 3.1 Kickstart ROMs
- ◆ Photogenics 1.2SE
- ◆ 3.1 Workbench (6 disks)
- ◆ Personal Paint 6.4
- ◆ Wordworth 4.5 SE
- ◆ Organiser 1.1
- ◆ Turbocalc 3.5
- ◆ Pinball Mania & Whizz
- ◆ Datastore 1.1
- ◆ Workbench 3.1 manuals
- ◆ Magic Pack application software manuals . . . . .

. . . . all for just **£49.95!!**

EYETECH GROUP LTD

The Old Bank, 12 West Green, Stokesley, North Yorkshire TS9 5BB, UK
Tel: 07000 4 AMIGA ~ 07000 4 26442 ~ +44(0)1642 713 185 Fax: 44(0)1642 713 634
Net: sales, info @eyetech.co.uk. www.eyetech.co.uk.

UK Bank/BS Cheques, Visa*, Mastercard*, Switch, Delta, Connect, Solo, Electron. Postal/Money orders accepted. (*A 3% charge applies to all credit card orders). Due to space limitations some of the specs given are indicative only - please ring/write for further details. Please check prices, specification and availability before ordering. **If ordering by post, please provide a daytime telephone number. Goods are not supplied on a trial basis**. A1200 items are tested with a Rev 1.D.1 motherboard - other boards may need modification. E.&O.E. All prices include VAT at 17.5%. Orders sent outside the EC do not incur VAT - divide the prices shown by 1.175 to arrive at ex-VAT prices.

UK Next Day Insured Delivery Charges: Software/Cables, EZCD I/F = £3.00 2.5" Drives, Accelerators, Manuals = £7.00, 3.5" Drives, FDDs, PSUs, SX32 = £9.00, CDPlus, Minitower, Desktop = £11.00, EZTW & EZPC = £15.00. Worldwide in 2-7 days from receipt of faxed order & payment details.

EYETECH

Due to variations in exchange rates the prices of some products may change - up or down - from the prices shown. Please ring or check our website [www.eyetech.co.uk/MAIN/APRICE.HTM] for the latest prices before ordering.

ces and Adapters: EZ-Key & DIY Tower Components

EZK2	Mk 2 Amiga/PC k/b -> A1200 kbd direct connect	28.95
EZK2-A4K	A1200 EZKey MK2/6p -> 5p adptr/A4000 kbd bdle	58.95
EZK2-W95	Mk2 Amiga/PC k/b->A1200 rib cab+Win95 kbd	38.95
EZSE-A	EZKey-SE Amiga 5p DIN k/b adapter for A1200/A600	18.95
EZSE-A/K	EZKey-SE Amiga + 6p->5p adptr + A4000 kbd bundle	38.95
EZKSE-P	EZKey-SE PC 5p DIN k/b adapter for A1200/A600	24.95
EZKSE-P/K	EZKey-SE PC k/b adapter for A1200/A600 + Win95 kbd	34.95
HD-2/3	2.5"/44way -> 3.5"/40w+4w & mtg bracket	11.95
HD-3/5	3.5" Zip/SyQuest/FDD/HD brkt/pl ->5" bay	5.95
KBD-5P6P	Amiga/PC k/b adapter 5p din-F ->6p m/d-M	5.95
KBD-6P5P	Amiga/PC kbd adapter 6p mindin-F ->5pd-M	5.95
BD-MF	5p DIN M - 5p DIN F k/b ex cable 1.2m	7.95
DF0-FP	Tower faceplate adapter for A1200 int FD	4.95

ces and Adapters: A1200 Ethernet, SCSI

PCM-ETH-C	PCMCIA ethernet card with Amiga/PC drivers	79.95
PCM-ETH-H	Hydra PCMCIA ethernet card with Amiga drvrs	129.95
PT-X60C	Crossed twisted pair/RJ45 for Sisys 60cm	6.95
SCS-CSQR	Classic Squirrel PCMCIA SCSI i/f 50pCM	69.95

Adapters: Flickerfixers, Genlocks, Video Digitisers
Adapters, Monitor Switches, Monitor Leads

GA-BV8M	BVision 8MB gfx card for A1200 (needs PPC)	159.95
GA-BMON/F	SVGA Monitor Switcher - BVisn/CVisn & EZVGA INFF2	39.95
GA-BMON/V	SVGA Monitor Switcher - BVisn/CVisn &15pHD In/Ex SD/FF	44.95
GA-BMON/A	M/Sync Monitor Switcher - BVisn/CVisn & 23p RGB socket	44.95
GA-SMON/F	SVGA MonSw - Ateo/Picasso 15pHD Gfx & EZVGA INFF2	49.95
GA-SMON/V	SVGA MonSw - Ateo/Pic'o 15pHD & 15pHD In/Ex SD/FF	49.95
GA-SMON/A	M/Sync MonSw- Ateo/Pic'o 15pHD & 23p RGB socket	54.95
GA-AMON	Auto Amiga/CV64-3D m/sync monitor switch	39.95
GA-M2SD	EZ-VGA-Mk2 external s/doubler PLL u/gradable	69.95
GA-PLFF	EZ-VGA-Plus external flickerfixer 23F-15F PLL	99.95
GA-SDUG	SDBL2 to SD-flickerfixer u/g	40.00
GA-INSD	EZ-VGA internal A1200 s/doubler non-upgrad'le	48.95
GA-INFF	EZ-VGA- internal A1200 flickerfixer	78.95
GA-INFF2	EZ-VGA- internal A1200 flickerfixer for use with BMON	78.95
GA-SEFF	EZ-VGA-SE flickerfixer 23F-15M Xtal	89.95
GA-15M9F	Adapter from 15p HD-M VGA to 9pD-F	9.95
GA-9M15F	Monitor adapter 9p D-F to 15p HD-M	9.95
GA-15M23M	VGA 15pHD-M -> 23pD-M Amiga RGB adapter	14.95
GA-UNBF	Amiga 23pD-F ->15pHD-F VGA adapter	12.95
GA-BUF	Amiga 23pD-F ->15pHD-F buffered adapter	16.95
PGB-24RT	ProGrab 24-RT Amiga parallel port video digitiser & psu	119.95
GLK-COMP	EZ-Gen composite video Genlock for A1200	69.95

ces and Adapters: A1200 Sound cards & software

D-PL12-DT	Prelude1200 for A1200 DT console only	129.95
D-PL12-TW	Prelude1200 for Tower w/ribbon cble/audio I/O brkt, CD i/f	144.95
D-PL12-UG	Upgrade node from PL12-DT to PL12-TW	19.95
D-PLZ2	Prelude ZorroII 16-bit full duplex sound card	189.95
MP-OP	Samplitude Opus 16 channel, virtual projects, FFT filtering	149.95
MP-LE	Samplitude-LE 4 channel , virtual projects, FFT filtering	49.95

Adapters - IDE/ATAPI & software

E-FLYR	Elbox 4-dev 32 bit high perf buf'd A1200 IDE i/f	54.95
E-XPRS	IDE-Express 4-dev high performance buf'd A1200 i/f	49.95
FLR-SPC-SP	ROM spacers for Elbox IDE-Flyer purchased w/ IDE-FLYR	4.95
FLR-SPC	ROM spacers for Elbox IDE-Flyer purchased elsewhere	8.95
-EZCD4	Mk4 4-dev buf IDE i/f w/AIPU w/A1200 CDROM s/w	28.95
-EZCD4/C	Mk4 4-dev buf IDE i/f w/3x40, 2x44 13cm cabs, CD s/w	38.95
-EZCD4/CE	Mk4 4-dev buf IDE i/f w/3x40, 2x44 cabs, EZIDE	48.95
-EZCDSE	Economy 4-dev buf IDE i/f w/A1200 CDROM s/w	18.95
-EZCDSE/C	Econ 4-dev buf IDE i/f w/3x40, 2x44 13cm cabs, CD s/w	28.95
-EZCDSE/CE	Econ 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	38.95
-CD4	4-device EIDE i/f for A4000 w/CDROM s/w	18.95
ZIDE	EIDE/ATAPI HD/CDROM/ZIP/LS120/SyQst drvr	34.95
ZIDE-CU	P/x upgrade to EZIDE from competitive product	14.95
ZIDE-SP	EIDE/ATAPI enhancer/CDROM Software Bundle Price	9.95

Adapters - Serial, Parallel, Floppy & Clock port expanders

R-PTJR	PortJunior - 460KB serial i/f for A1200	39.95
BL-S12	IOBlix 12S - 1.5Mbps serial i/f for A1200	49.95
BL-P12	IOBlix 12P - EPP parallel port i/f for A1200	49.95
R-PTPL	PortPlus - 2x 460KB ser + 1x 800KB par i/f for A1200	79.95
BL-Z2	IOBlix Z2 - 4x1.5Mbpsser + 1x EPP par port ZorroII	89.95
BL-Z2PX	1x EPP par port expan for INT-IOBL-Z2 (to 4xs+2xP)	19.95
K-EXP	ClockUp 4-way clock port expander for A1200	19.95
D-DF0	Interface for std Sony FDD for DF0 880KB	9.95

s & Cable Adapters: Audio & Mains

UD-CD	CDROM invt'd T audio cab .6m + 2xRCA plg	9.95
UD-MIX	RCA(phono)-M -> RCA-M+RCA-F 'Y' mixer lead 1.8m	6.95
UD-2M2M	RCA(phono)-2xM -> RCA2xM stereo lead 1.8m	4.95
UD-MJ/PH	3.5mm st minijack->2xphono-M plugs 1.2m	5.95
AUD-RCA	RCA(phono)-M -> 2xRCA-F adapter 'Y' mixer	2.50
AUD-RCA-G	RCA(phono)-M ->2xRCA-F gold plated adapt 'Y' mixer	3.50
EC-1.5M	AC power cable 13A plug -> IEC skt 1.5m	2.95
EC-4X13	AC powerstrip 1xIEC-M -> 4x13A-F mains skt	19.95
EC	Rewirable IEC monitor plg for PSUs/MT/DT	4.95

s & Cable Adapters: Serial, Modem, SCSI, Printer

ER-EX2M	DB25-M -> DB25-F RS232 extn cab 2m	7.95
ER-EX50C	DB25-M -> DB25-F RS232 extn cab 0.5m	6.95
ER-NUL2M	Null modem cable w/ D9F & D25F at each end 2m	9.95
ER-NUL5M	Null modem cable w/ D9F & D25F at each end 5m	14.95
ER-NUL10M	Null modem cable w/ D9F & D25F at each end 10m	19.95
SER-25F9M	25p-F to 9pM serial RS232 adapter	4.95
SER-25M9F	25p-M to 9pF serial RS232 adapter	4.95
SCS-50/50CF	Centronics 50p-F to Centronics 50p-F (for Squirrel)	14.95
CS-25D/50C	SCSI cable DB25-M -> Cent50-M 1m	9.95
CS-25D/25D	SCSI cable DB25M-DB25M mac type 1m	9.95
CS-50C/50C	SCSI cable Centr50M->Centr50M 1m	9.95
CS-50H/50C	SCSI-2 cable 50h/pDM->Centr50M 1m for PPC	19.95
CS-50H/25D	SCSI-2 cable 50h/pDM->25D-M 1m for PPC	19.95
AR-FULL	Bidirectional printer cable all pins connected	9.95

s & Cable Adapters: VGA, Keyboard, Switchboxes, Cables, Scart Cables
also BMON, SMON autoswitches above)

SW-S/K	Dual monitor & k/b switchbox	19.95
SW-S/K/M	Dual monitor, k/b & mouse switchbox	24.95
BD-MM	5p DIN M - 5p DIN M k/b cable 1.2m	7.95
GA-MF	15p DM-HD - 15p DF-HD VGA ext cable 2m	9.95
GA-MM	15p DM-HD - 15p DM-HD VGA cable 2m	9.95
SCAR-CMP	Amiga comp video (RCA)+2xAudio to SCART	12.95
SCAR-RGB	Amiga 23p+2xRCA to RGB TV SCART + audio	12.95

s: HD, CDROM, Floppy, Clock Port Data & A1200 HD Power

D-40F44F	2.5" (44F) to 3.5" (40F) data cab adapt for A1200 30cm	9.95
D-2F	Power splitter floppy drive to hard drive + floppy	9.95
D-30C	44->40way 3.5" HD data & pwr cabs - A1200	14.95
D-KIT	A1200 full 3.5" hard drive fitting kit	24.95
-2W-9C	22way-F x2 A1200 clock port cable 9cm o/a	5.00
-2W-50C	34way-F x2 FDD ribbon cable for tower 50cm	9.95
-2W-20C	40 way IDE cable 2 connector 20cm	5.00

CAB40-3W-1M	40Way IDE/HD/CD cable 3 connector 1m o/a len	9.95
CAB40-3W-60C	40w-F x3 HD/CD/IDE cable 20+40=60cm o/a	9.95
CAB40-CUST	Custom cable 3x40way IDE up to 1.5m	19.95
CAB44-2W-13C	44way (2.5" HD) cable 2 connector, 13cm o/a	9.95
CAB44-2W-60C	44way (2.5" HD) cable 2 connector, 60cm o/a	19.95
CAB44-3W-12C	44way (2.5" HD) cable 3 connector, 12cm o/a	12.95
CAB44-3W-24C	44way (2.5" HD) 7+17cm,3 connector,24cm o/a	14.95
CAB50-CUST	Custom cable 3x50way IDC SCSI + 1xCent50-F 60cm	19.95

Cables: HD, CDROM, Floppy Power Splitters - Tower Systems

CABPW-1W-1F	Power converter cab HD-M -> FD-F	4.95
CABPW-2W-1H1F	HD/FD power splitter HD-M->1xHD-F/1xFD-F	6.95
CABPW-2W-2F	FDD power splitter 4pM->2xFD-F	6.95
CABPW-2W-2H	HD/CD power splitter 4p-M ->2x 4p-F 15cm	6.95
CABPW-3W-2H1F	HD/FD power splitter HD-M->2xHD-F/1xFD-F	8.95
CABPW-3W-3H	HD power splitter HD-M -> 3xHD-F	8.95
CAB-HD-PWXTN	4p-M -> 4p-F HD/CD power cab ext 90cm	9.95
CAB-HD-FD/4	23p-M-floppy -> 4p-F HD/CD power 90cm	9.95

New - ISDN Term Adapters, 56k Modems & Net Access Bundles

lower prices

NET-ISP	One time setup/support/unlimited usage/no ongoing net access charge (0845 call charges only) with 25MB web space, 10 email addresses, 90 days free net support.	49.95
NET-EYE-1	128Kbps ISDN T/A + NET-ISP as above	179.95
NET-EYE-2	128K ISDN T/A, Port[illegible] NET-ISP as above	209.95
NET-EYE-3	128K ISDN T/A [illegible], TCP/IP s/w + NET-ISP	219.95
NET-EYE-4	128K ISDN T/A, PtJn, [illegible], TCP/IP s/w + NET-ISP	249.95
NET-EYE-5	56Kb fax/voice mode[illegible] NET-ISP as above	109.95
NET-EYE-6	56Kb fax/voice modem, PortJnr i/f + NET-ISP as above	139.95
NET-EYE-7	56Kb fax/voice mdm, web, email, TCP/IP s/w + NET-ISP	149.95
NET-EYE-8	56Kb fax/voice mdm, PtJn, web, email, TCP/IP + NET-ISP	179.95
MOD-56K	56K Voice/Data/Fax Modem External inc serial cable	69.95
MOD-ISDN	128K External ISDN terminal adapter inc serial cable	139.95

CDROM Systems including EZ-Tower & MT/DT Bundles

CD-SE-24X	CDPlus-SE system 24 speed with CDROM s/w	74.95
CD-SE-32X	CDPlus-SE system 32 speed with CDROM s/w	84.95
CD-DT/MT-24X	CDPlus Desktop/Minitower 24 x with CDROM s/w	94.95
CD-DT/MT-32X	CDPlus Desktop/Minitower 32 x with CDROM s/w	104.95
ADPT-AUD-CDSE	CDPlus-SE A1200/CD audio mixr/adapter	14.95
CAB44-CD-13C	44way (2.5" HD) cable purch with CD/HD 13cm	6.00
CAB40-DDC	A1200 IDE skt adptr 40F-40M with mtgs 15cm	9.95
CD24-BARE	Bare 24 speed CDROM mechanism for twr/A4k	39.95
CD32-BARE	Bare 32 speed ATAPI CDROM mechanism for twr/A4k	44.95

CDWriter/ReWriter Systems inc. EZ-Tower & MT/DT Bundles

CDR-BARE-2X8	EZWriter Mechanism (no MakeCD)	179.95
CDR-IN-2x8	EZWriter 2/8x with MakeCD for A4000,Tower	209.95
CDR-SE-2x8	EZWriter-SE external 2/8x with MakeCD	249.95
CDR-DT/MT-2x8	EZWriter Desktop/Minitower 2/8 speed with MakeCD	269.95
CDR-PL-2x8	EZWriter-Gold external 2/8x with MakeCD	279.95
CDRW-BARE-226	EZReWriter Mechanism (no MakeCD)	199.95
CDRW-IN-226	EZReWriter 2x2x6 w/MakeCD for A4k,Twr	239.95
CDRW-SE-226	EZReWriter-SE external 2x2x6 w/MakeCD	279.95
CDRW-PL-226	EZReWriter-Gold external 2x2x6 w/MakeCD	299.95
CDR-CDSE-UG	EZCD-SE+40+44way cabs + CDROMs/w w/CDR	20.00
CDR-CDM4-UG	EZCDMk4+40+44way cabs + EZIDE s/w w/CDR	30.00
CDR-CDFL-UG	IDE-Flyer high-speed IDE i/f, s/w, cabs purch w/CDR	50.00
CDR-CDXP-UG	IDE-Express high-speed IDE i/f, s/w, cabs pur w/CDR	45.00
CDR-DSK-10	Recordable CD media (WORM) 650MB x10	14.95
CDR-DSK-10-SP	Recordable CD media 650MBx10 pur w/EZWriter	10.00
CDRW-DSK	Single CDrewritable disk 650MB	9.95
CDRW-DSK-SP	Single CDrewritable disk 650MB pur w/EZReWriter	5.00
DVR-MCD-TAO-P	MakeCD TAO (P) Amiga CD rec s/w w/ATAPI	38.95

EZTowerZ4 Systems, Z4 busboard expansions

CASE-DTZ4	DIY EZTower-Z4 250W PSU, LED adpt, FD cab/fp	89.95
CASE-DTZ4-PL	DIY EZTower-Z4 250W PSU, EZKey, PC kbd, FD cab/fp	109.95
CASE-DTZ4-PLZ4	DIY EZTwr-Z4, EZKey, PC kbd, FD cab/fp Z4 slots	239.95
CASE-DTZ4-PLZ4-S	DIY EZTwr-Z4 & Z4 adapter as above 1st 100 orders	199.95
CASE-RTZ4	Ready-to-Use EZTwr-Z4 250W PSU, LED adpt, FD cab/fp	109.95
CASE-RTZ4-PL	RTU EZTower-Z4 250W PSU, EZKey, PC kbd, FD cab/fp	129.95
CASE-RTZ4-PLZ4	RTU EZTwr-Z4 250W, PC kbd/adpt, FD cab/fp, Z4 slots	259.95
CASE-RTZ4-PLZ4-S	RTU EZTwr-Z4 & Z4 adapter as above 1st 100 orders	219.95
ADPT-Z4	Z4 adapter for A1200 5xZ2, 2xZ2, 2xclock ports	149.95
ADPT-Z4-SP	Z4 adapter as above Ist 100 orders	129.95
CASE-FT-A4KUG	EZ-Tower upgrade from PC to A4000 k/b (time of purch)	19.00

EZTower Systems, MiniTower/Desktop Cases & Accessories

CASE-FT-DIY	EZTwr Mk4 kit w/250W, FD cab/fp, bkpl for self conv'n	79.95
CASE-FT-DIY-PLUS	EZTower kit w/250W PSU, EZKey, PC kbd, FD cab/fp	99.95
CASE-FT-RTU	Ready-built EZTower 250W PSU, LED adpt, FD cab/fp	99.95
CASE-FT-RTU-PLUS	Ready-built EZTwr w/250W, EZKey, PC kbd, FD cab/fp	119.95
CASE-DT	Desktop case with 200W+ psu for HD/CDROM	29.95
CASE-MT	MiniTower case wth 200W+ psu for HD/CDROM	29.95
CASE-FT-A4KUG	EZ-Tower upgrade from PC to A4000 k/b (time of purch)	19.00
CASE-FT-EXKT	EZ-Tower conversion kit - No PC Tower	39.95
ADPT-AUD-EZTW	EZTwr audio mixer/adapter for A1200/CDROM	14.95
ADPT-SCSI-EZTW	EZTwr SCSI adpt 30cm 2xCent50F, 1xIDC50F	14.95
ADPT-PWR-PPC	2nd A1200 m/bd powerfeed adapter (if req'd) for PPC acc	19.95
CAB-SER-SSQ	9pDM->9pDF SurfSq EZTwr ser extn cab 50cm	9.95

SVGA Monitors - require Scandoubler and/or Flickerfix to use all Amiga modes

MON-14-.28	14" dig SVGA 0.28DP 1024x768@60Hz	89.95
MON-15-.28	15" dig SVGA 0.28DP 1024x768@60Hz	119.95
MON-17-.28	17" dig SVGA 0.28DP 1280x1024@60Hz	209.95
MON-17-.26	17" dig SVGA 135MHz, 0.26DP 1600x1280@75Hz	399.95
ADPT-MON-SEFF	EZVGA-SE ext flickerfixer purch w/ monitor	85.00
ADPT-MON-M2SD	EZVGA-Mk2 ext s/dblr u/g'able purch w/ monitor	60.00
ADPT-MON-PLFF	EZVGA-Plus ext flickerfixer purch w/ monitor	90.00
ADPT-MON-INSD	EZ-VGA internal s/doubler purch w/ monitor	45.00
ADPT-MON-INFF	EZ-VGA internal f/fixer purch w/ monitor	75.00
ADPT-MON-INFF2	EZ-VGA internal f/fixer purch w/ monitor for BMON	85.00

Digital Cameras and Amiga Digital Camera Software

CAM-OLY-820L	Olympue 820L,flash, LCD, smtcrd 1024x800, Amiga s/w	299.95
DVR-CAM-CAS	CamControl s/w for Casio QV10/100/300/700	29.95
DVR-CAM-FUJ	CamControl s/w for Fuji DS5/DS7 /DX7/DX9	29.95
DVR-CAM-KOD	CamControl s/w for Kodak DC20/DC25	29.95
DVR-CAM-MIN	CamControl s/w for Minolta Dimage V	29.95
DVR-CAM-OLY	CamControl s/w for Olympus 420L/820L/1000L/1400L	29.95
INT-12I-PTJR-SP	PortJnr hi-speed ser i/f pur with CamControl s/w	30.00

Amiga Printer Software/Drivers

DVR-ENPR	EnPrint. Amiga printer driver for pre-03/97 Epson Printers	9.95
DVR-TBPR7	TurboPrint 7.x Amiga printer driver (English)	38.95
DVR-TBPR6	TurboPrint 6.x Amiga printer driver (English)	34.95
DVR-TB6/7-UG	TurboPrint 6.x to 7.x upgrade (Send TB6 disk w/order)	19.95

Amiga Image Conversion/Effects Software, Scanner Software, Scanner Bundles and Adapters

SCN-FBA4-BDL3	UMAX award-winning SCSI A4FB scanner with PScope	179.95
	---------- Free ArtEffect-SE v1.5 with above whilst stocks last ----------	
DVR-SQ4	ScanQuix4 + 1 driver (Epson/HP/Artec/Mustek)	59.95
DVR-SQ4-U	ScanQuix4 + 1 driver (UMAX)	69.95
DVR-SQ4-UG	ScanQuix3 to SQ4 upgrade (trade-in & receipt reqd)	29.95
DVR-PHS	PhotoScope UMAX-SCSI Amiga Scanner Driver	59.95
CAB-SCS-25D/50C-S	SCSI cable DB25-M -> Cent50-M 1m pur w/scnr	5.00
CAB-SCS-25D/25D-S	SCSI cable DB25M-DB25M mac type pur w/scnr	5.00
CAB-SCS-50C/50C-S	SCSI cable Centr50M->Centr50M 1m pur w/scnr	5.00
CAB-SCS-50H/50C-S	SCSI-2 cable 50h/pDM->Cent50M 1m for PPC pur w/scnr	10.00
CAB-SCS-50H/25D-S	SCSI-2 cable 50h/pDM->25D-M 1m for PPC pur w/scnr	10.00
ADPT-SCS-CSQR-SP	Classic Squirrel PCMCIA SCSI i/f 50pCM pur w/scnr	54.95
ADPT-SCS-50/50CF-SP	Centronics 50p-F to Centronics 50p-F (SQ) pur w/scnr	7.50
ADPT-SQ3-PAR	SQ3 adapter Epson scanner ->parallel port cable	9.95
CAB-PAR-FULL	Bidirectional printer cable all pins connected	9.95

Hard & Floppy Drive, CDROM, LS120 & Zip Mech. & Cases

FDD-ITL-1200	Replacement A1200/600 int FDD 880KB	24.95
FDD-ITL-BARE	Bare 1.44/880 Sony FDD for tower (needs EZDF0/Catwsl)	19.95
FDD-ITL-D/C/I	Twr int 880Kb FDD(Sony/EZDF0/cab bundle)	29.95
FDD-ITL-D/I	Twr intl 880Kb FDD (Sony/EZDF0) No cable	24.95
HD2-21	21MB 2.5" hard drive 90 days warranty	29.95
HD2-170	170MB 2.5" hard drive	49.95
HD2-260	260MB 2.5" hard drive	54.95
HD2-720	720MB 2.5" hard drive	99.95
HD2-1.4	1.4GB 2.5" hard drive for Amiga	129.95
HD2-1.8	1.8GB 2.5" Hard Drive	149.95
HD3-2.5	2.5GB 1"x3.5" IDE drive for tower	94.95
HD3-3.2	3.2GB 1"x3.5" IDE drive for tower	109.95
HD3-4.3	4.3GB 1"x3.5" IDE drive for tower	129.95
HD3-LS120	Panasonic LS120 floppy/optical 1.4/120MB	79.95
HD3-LS120-CT1	Single 120 MB cartridge for LS120 drive	14.95
HD3-LS120-CT3	3-pack of 120MB (nominal) LS120 carts	29.95
HD3-ZIP-CT1	Single 100MB (nominal) Zip cartridge	14.95
HD3-ZIP-CT3	3-Pack of 100MB (nominal) Zip cartridges	29.95
HD3-ZIP-IDE	Bare ATAPI/IDE Zip drive internal	79.95
CAB44-CD-13C	44way (2.5" HD) cable sold with CD/HD 13cm	6.00
CASE-ZIP	Metal slim case-FDD/IDEZip/SyQuest/LS120	9.95
CASE-HD-ECON	External 3.5" HD case no psu	19.95
CASE-HD-REM	Removable drive case for 3.5" HD (metal) no psu	24.95

Keyboards, Mice, PSU's, Misc. Hardware

FAN-60MM	Cooling fan for A1200 60x60x25mm 5/12v	14.95
KBD-A1000	A1000 keyboard with 6-pin mini-Din cntr*	39.95
KBD-A1200	Replacement A1200 k/b w/ribbon cable*	24.95
KBD-A4000	A4000 keyboard with 6-pin mini-DIN plug*	34.95
KBD-WIN95	Windows 95 keyboard with 5-pin AT DIN plug*	12.95
MOU-WHI	Amiga mouse - white/cream -with mousemat*	6.95
PSU-100	100w PSU for Amiga (fit your old lead - inc instrns,cntrs)	29.95
PSU-200	200w PSU for Amiga (fit your old lead - inc instrns,cntrs)	39.95
PSU-230	200/250w replacement PSU for MT/DT/FT	29.95
PSU-A1200	A1200 23W PSU (original) 90 days warranty	19.95
SPK-16W	16W PMPO speakers w/ PSU 3.5mm jack, AC mains PSU	10.95
SPK-60W-INT	5.25" Bay Internal mounting 60W PMPO speakers/amp	24.95

(* NB items subject to mechanical wear & tear are limited to 90 days warranty on those components)

Accelerators: PowerPC with 680x0 Co-processor

ADPT-VGA-BV8M-SP	BVision 8MB A1200 gfx card pur w/ PPC acc	139.95
ACC-PPC-16-4025	Bliz'd PPC603/160MHz+040/25/FPU/ no SCSI	199.95
ACC-PPC-16-6050	Bliz'd PPC603/160MHz+060/50/FPU no SCSI	479.95
ACC-PPC-24-4025	Bliz'd PPC603/240MHz+040/25/FPU no SCSI	319.95
ACC-PPC-24-6050	Bliz'd PPC603/240MHz+060/50/FPU no SCSI	549.95
ACC-PPC-16S-4025	Bliz'd PPC603/160MHz+040/25/FPU/SCSI-2	268.95
ACC-PPC-16S-6050	Bliz'd PPC603/160MHz+060/50/FPU/SCSI-2	548.95
ACC-PPC-24S-4025	Bliz'd PPC603/240MHz+040/25/FPU/SCSI-2	388.95
ACC-PPC-24S-6050	Bliz'rd PPC603/240MHz+060/50/FPU/SCSI-2	618.95
ADPT-PWR-PPC	2nd A1200 m/bd powerfeed adapter (if req'd) for PPC acc	19.95

Accelerators: Apollo 680xx

ACC-060-66	Apollo '060 MMU/FPU 66MHz A1200 acc (lim avail)	359.95
ACC-060-50	Apollo '060 MMU/FPU 50MHz A1200 acc (lim avail)	267.95
ACC-040-40	Apollo '040 MMU/FPU 40MHz A1200 accel	184.95
ACC-040-40-SE	Apollo '040 MMU/FPU 40MHz A1200 accel (20% o/c)	164.95
ACC-040-28	Apollo '040 MMU/FPU 28MHz A1200 accel	124.95
ACC-030-40-1S	Apollo '030 MMU/FPU 40MHz A1200 accel 1 simm skt	59.95
ACC-030-40-2S	Apollo '030 MMU/FPU 40MHz 2 simm skt (tower only)	69.95
ACC-4/60-SSKT	Apollo 1240/60 2nd simm socket & fitting	20.00

Memory: Simms, Zip RAM & FPU's - Please ring for latest prices

MEM-32MB-72P	72 pin 32 MB 32 bit simm for Amiga (+£10 for single sided)	39.95
MEM-16MB-72P	72 pin 16MB 32 bit simm for Amiga	29.95
MEM-8MB-72P	72 pin 8MB 32 bit simm for Amiga	19.95
MEM-4MB-72P	72 pin 4MB 32 bit simm 70 ns	12.95

WB Disks, Kickstart ROMS, Manuals etc

SYS-WB30-DSK	Amiga WB3.0 disksx5 + Eyetech HD install	9.95
SYS-WB31-DSK	Amiga Workbench 3.1 disks x6 (w/ HD inst)	14.95
SYS-KS31-ROM	A1200 Kickstart 3.1 ROM chips (2 chips)	29.95
SYS-KS31-SET	A1200 K/s 3.1 ROMs & WB3.1 dskx6 (no manuals)	36.95
SYS-KS31-MPUG	A1200 Mag Pk u/g 3.1ROMs,WB3.1,appln s/w, manuals	49.95

EZPC-Tower & Siamese Systems & Components

EZPC-HSE-CF1	EZPC SiSys system Home Studio Edition	999.95
EZPC-DVE-CF1	EZPC SiSys system Digital Video Edition	1369.95
EZPC-XLS-CF1	EZPC SiSys system - the ultimate Amiga expansion	1999.95
EZPC-AMP-CF1	A1200 Magic Pack/24x/3.2GB/etc EZPC-Tower upgrade	399.95
PSW-W9X/SS	Windows 9x & Lotus SmartSuite bundle	99.95
SYS-SIA-ETH	Siamese System2.5 w/PC, Amiga ethernet	189.95
SYS-SIA-R25	Siamese System software RTG v2.5	99.95
SYS-SIA-R21	Siamese serial s/w RTG v2.1 (ref'ble agnst v2.5)	19.95
SYS-TCP-MIA	Miami TCP/IP stack for Amiga (reg'n fee paid)	24.95

CD32, SX32 & Accessories

ADPT-KBD-SX32P	SX32 Pro PC k/b adapter cable 10cm	9.95
CD32-JOY	CD32/SX32 joypad	9.95
CD32-PAL	CD32 console with 18Wpsu/joypad/RF lead	149.95
SX32-MK2	SX32 Mk2 Ram/Clock/FPU expander for CD32	149.95
SX32-P40EC	SX32 Pro 030EC/40MHz Acc/Ram/Clk/FPU to 64MB	199.95
SX32-P50	SX32 Pro 030/50MHz Acc/Ram/Clk/FPU to 64MB	249.95

A1200 Magic Packs, Accessories and Upgrade Bundles

AMP-STR-FDD	A1200 Starter Magic pack FDD vers /w s/w	179.95
AMP-STR-HD2	A1200 Starter Magic pack w/170 HD, EZCD i/f, skt & s/w	248.95
AMP-MCD-PK3	Amiga M P 24xCD/2.5GB/'040-28/16MB/MT	598.95
AMP-PDV-PK3	A1200 Mgk pk 170MB/'030-33/8MB	328.95
AMP-PDV-EZT	A1200 Mgk pk 170MB/'030-33/8MB & EZTW+	448.95
AMP-PRO-PK3	A12 EZTwr Pro2 '040-40/32MB/4.3/PCkb/20xCD	798.95
AMU-STH2-CDUG	24 x CDROM upgrade for AMP-STR-HD2 w/PSU	59.95
AMU-MCD-4040/32	040/40/MMU/FPU/32MB u/g w/MCD-PK3	69.95
AMU-PDV-4025/16	040/25/MMU/FPU/16MB +100w ug w/PDV-PK3	99.95
AMU-PRO-HAB/64	160PPC,040/40/MMU/FPU/64MB ug w/PRO-PK3	129.95
AMU-PRO-MONSD	Int Scandoubler + 14" Digital Monitor ug w/PRO-PK3	129.95
AMU-PRO-LS120	LS120 120/1.44/0.72MB drive ug w/PRO-PK3	74.95

Tools, Test Equipment, Motherboards & Workshop Services

ACC-4/60-SSKT	Apollo 1240/60 2nd simm socket & fitting	20.00
PT-MBD-1200	Replacement A1200 motherboard (no ROMs)	129.95
PT-EXT-PLCC	PLCC extractor tool for 33Mhz FPU	9.95
PT-ATM-9	9-range analogue test meter V, I, R, battery tests	9.95
PT-DTM-14	14-range digital test meter V, I, R, battery, diode tests	12.95
FIT-EZ-MAIN	A1200 to EZ-Tower fitting - A1200 + 1 drive	30.00
FIT-EZ-XTRA	Fitting/testing per customer-supplied periph into EZtwr	7.50
REP-AM-2B/1D4	A1200 motherboard rev 2B or 1D4 manufacturing fault fix	30.00

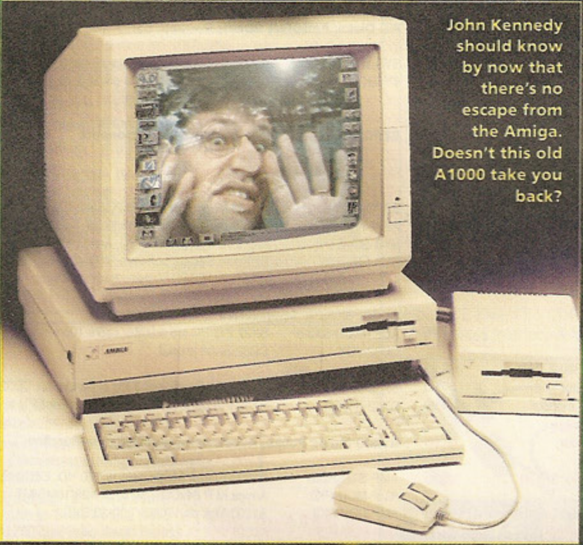
The VEITCH 1993-1999 Years





The best of times and the worst of times, with **Nick Veitch**.

As this is my last issue, in lieu of a gold watch or a nice cake or something, I've been asked by the *Amiga Format* team to briefly give everyone a personal view of the last 72 issues of *AF* that I've contributed to. I know what you're thinking – how dull. To be honest, that's what I thought too, until I remembered all the interesting behind the scenes tales I could tell and all the skeletons I could drag out of cupboards, dust down and expose for the merriment of others.



John Kennedy should know by now that there's no escape from the Amiga. Doesn't this old A1000 take you back?

Also, I can tell you what my favourite bits of kit are, what sort of things are permanently installed on my hard drive, and my favourite and most embarrassing moments about working for this mag.

THE FIRST TIME

A few user groups and fanzines have asked me for interviews in the past, and some of the questions that always come up are when did you first...

SEE AN AMIGA? The first Amiga I ever saw was in Tottenham Court Road in 1986. It was an A1000 and I noticed it through the window. I had heard about the Amiga but never seen one until then. I went into the shop and talked to the assistant about it for a while, but all he really seemed to know was how much it cost. I forget the exact price because it was so staggeringly expensive I knew I'd never be able to afford it.

This one just had the screen requesting a Workbench disk on it because nobody knew how to work it. But it still looked cool...

PLAY AN AMIGA GAME? The first game I played that I really remember was *Falcon*. It was breathtakingly excellent. I was sharing a house with John Kennedy at the time and he had an A500 which I used to sneak in and play with when he was at lectures.

In fact, *Falcon* was probably the thing that made me decide to get an Amiga because we desperately wanted to play head-to-head!

USE SOME SERIOUS SOFTWARE? John Kennedy was doing some freelance work for an Amiga magazine and they wanted someone to review a 3D modelling package. I studied engineering so I'd used 3D stuff on big mainframes, so John suggested I should look at it.

So, *Sculpt Animate 4D* was the first piece of Amiga software I ever used. It was really fantastic at the time, but on our 68000-powered machine it took an hour to render a simple coffee cup.

BUY A PERIPHERAL? I got a 1084S with my Amiga so I don't think that counts. I bought a RAM expansion soon after (it was required for *Falcon* if you wanted to play a link-up game) but the first major peripheral I bought was a hard drive, an A590, which also came with a whopping 2Mb of RAM. 2Mb was worth something in those days. I've never been without a hard drive since.

If anyone out there doesn't have one (there are some, you know) get one now – it'll change your life.



MY DOPUS SCREEN

I thought I might tell you a bit about the machines we use in the office. The one on my desk is an A4000 with CyberStorm PPC/'060 and a CyberVision3D card, which I've found great. And here is what I see on it most often...

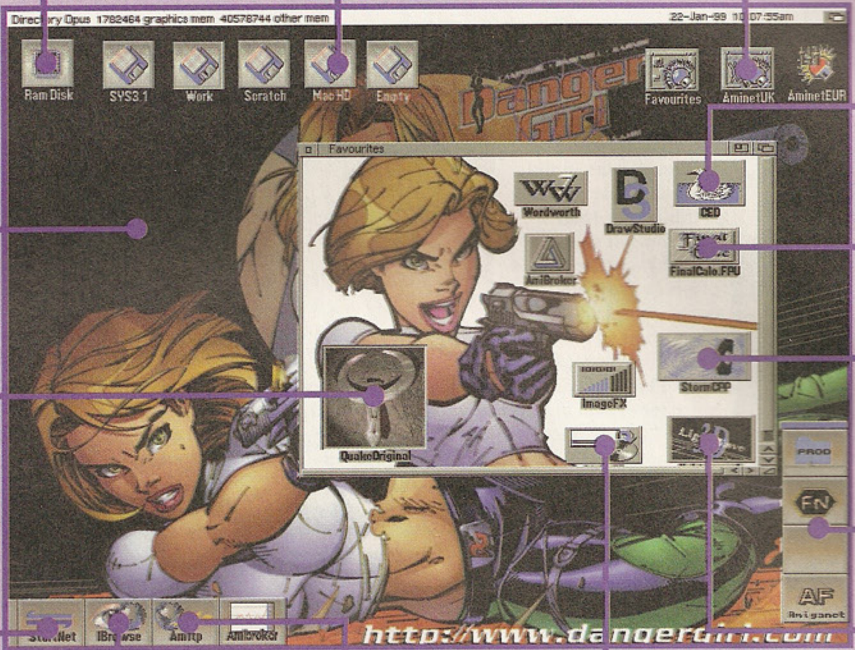
Yes, there is a lot of RAM on this machine: 64Mb of fast RAM is in the CyberStorm PPC. Quite handy for graphics work – I recommend you get as much RAM as possible.

I have a 300Mb Mac-formatted partition ready for use with *Fusion* – you never know when you'll want to use it.

I spend an awful lot of time connecting to Aminet so I set up these desktop Aminet links in *DOpus*, one for the main archive and one for a European mirror site. *DOpus* is good for this.

I use *CEd* quite a lot, normally for editing scripts or writing ARexx programs. I know that it's considered out of date, but it's really geared towards programming and is still very good for that.

This *Opus* "theme" is based around *Danger Girl*, a comic book character. I set up a script to randomly select a theme every time I run *DOpus*, but most of them are comic related. Visit the *DG* website for more info on *Danger Girl*.



Final Calc is extremely handy to have, even if I mainly use it for producing nice 3D graphs. Hurrah for reader surveys!

Although there are plenty of great Amiga games, I think *Quake* is a good symbol of what's really possible on the Amiga – full points to ClickBOOM for being brave enough to licence it.

I don't write many *C* programs these days as I have so little time, but I think H&P have done a great job on this compiler.

I set up this button bar to deal with our office network. It allows me to connect to the office Macs, our web page and FTP server.

This is a hangup from when I wasn't online all the time, but it's still useful. I use *Miami* now – doesn't everyone?

IBrowse is a great browser (but no Java yet) and, surprisingly, it's faster than *Netscape* or *IE4* on our office Mac.

Although *DOpus FTP* is great, I sometimes use *AmFTP* too. *Amibroker* is great if you're interested in shares.

MakeCD is often in use here, although *MasterISO* is also very good. *MakeCD* just happens to support the drive I have.

Lightwave is still the greatest 3D rendering software, and the one we turn to when we need a rendered image for the mag's cover.

SHOW US YOURS!

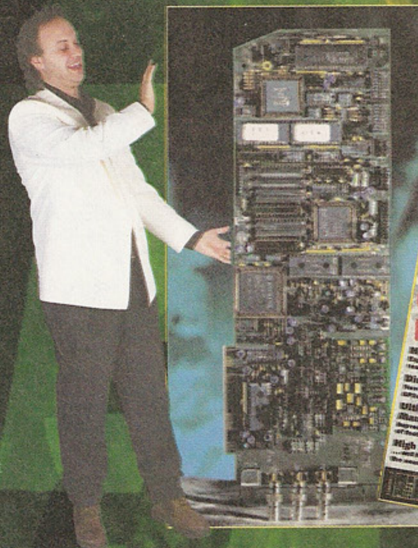
Er, in a manner of speaking. We'd like you to send us grabs of your Workbench/*DOpus* screen, along with details of your Amiga setup, what sort of software you use regularly, your favourite games and a picture of yourself. We're particularly interesting in hearing from people who are using their Amiga for strange or unusual things. We'll put the best ones on our CD and include one in the mag too. Send your info to: Reader Profiles • Amiga Format • 30 Monmouth Street • Bath • BA1 2BW.

THE BEST AND WORST

There have been far too many good times to possibly list here. Moments that stand out are getting to meet people like Jay Miner and speaking with Carl Sassenrath and Dave Haynie. One of the very first things I got to do at *Amiga Format* was review Newtek's Video Toaster (which had been equipped with some standards convertors for the purpose), which I dare say most European-based Amiga owners have never seen.

I've been lucky over the years to get to play with all sorts of hardware and software that most of you would kill, or at least severely maim, for.

My favourite issue ever is *AF72*. Not only did we have a huge breaking news story, when the Amiga was sold to Escom, and a review of the fastest Amiga accelerator in the world (the CyberStorm '060), but we also had a 10th birthday party for the Amiga.





The Video Toaster (left) is about the first thing I ever reviewed for *AF*, way back in issue 51. *AF72* (below) is my favourite issue. What's yours?

I was genuinely surprised that so many people wanted to contribute to it, including all of the previous editors of the magazine, most of whom were up to entirely different things by then, and loads of games industry figures who still had a fondness for the Amiga platform, even if they no longer developed stuff for it.

The worst thing I've ever done is, er, forget to write an issue of *Backstage*, our subscribers' newsletter. There was an awful lot going on at the time and we had a few new people on

Continued overleaf ➡



the team. I completely forgot to write it and everyone else forgot about it too until the whole magazine was finished and ready to be sent out.

Of course, we have made some mistakes over the years, but maybe not as many as you might think. You may spot the odd spelling mistake in *AF* (which I personally blame Mark for), but not so many these days.

The worst mistake of that nature we've ever made since I was working on the magazine was probably the time we gave something 00%, simply because someone forgot to type the score in the box, and nobody else on the team noticed. I did help Jason Holborn to blow up an A3000 once by incorrectly advising him on what ROMs he could put in it, which was quite bad, but I won't make that mistake again – we don't have an A3000 any more...

Oh, and I had to appear live on stage at the Future Entertainment show as part of a panel of experts answering technical questions. The only problem was that none of the other experts turned up and I felt dreadful, having spent the evening before overindulging. If any of you were there and received an extremely incoherent and mumbled response, I apologise.

As for the worst things other people have done, well, I could go on for pages and pages but Ben and Mark would probably edit them all out.

I do feel very lucky that over the years I've got to work with some very talented people, meet lots of interesting characters (even Tony of Power Computing isn't all bad) and got to speak to thousands of you. I must confess that not every conversation has been riveting, but I've enjoyed speaking to many of you and I hope I've helped you in some way. I know that many of you have given me ideas for the mag, so if you think *AF* is great then it's mostly down to you, not me.



MY TOP TEN TOP GAMES OF ALL TIME...

I've reviewed a lot of games in my time so I thought I'd compile a list of my favourite ones for you. Some are old, some are new, but they're all highly recommended. I tend to like thinking and strategy games best, so don't be surprised if there aren't any platformers here. Even if you don't generally like such games, these are true classics and I'm sure you'll enjoy them. If you don't have all of these games, seek them out!

1 SENSIBLE SOCCER – This is probably the greatest cause of lost man hours in the *Amiga Format* office. Although, as John Hare himself said, *Kick Off* was the first playable football game, this is widely recognised as the best. The graphics are simple but the gameplay is superb and requires much more skill and tactics, certainly when playing against your mates, than the 3D-style footy games now in vogue. I'd have to say this is probably my all time favourite game ever, on any platform.



Top down footy magic – *Sensible Soccer* is one of the most playable games ever.

It's certainly the single game I've spent the most hours playing, especially when I played the management game and got Northern Ireland to the World Cup finals – we got kicked out in the quarter finals and I got sacked, which I think is a little harsh, and a tad unrealistic. If anyone managed to get Northern Ireland to the quarter finals these days they'd get a knighthood and about 1.5 million free pints of Guinness...

2 PIRATES! – This is the game that Sid Meier couldn't stop playing, allegedly, and it's really good. You sail around the Caribbean, performing missions and preying on the towns and ships of the region, amassing gold and raising your status. The randomness of the game means it's different each time you play. You should try it.



Sail round the Caribbean islands robbing people in *Pirates!*

3 QUAKE – This is the only modern game on my list. I have to say that I think I enjoyed playing *NemacIV* better than *Quake*, but it's a good game and very customisable in loads of different ways. Although all ClickBOOM have done is port it from the PC code, they've done a very good job.



ClickBOOM deserve the plaudits for their *Quake* conversion.

4 RAILROAD TYCOON – Sid again. Railroad Tycoon was a very original game concept, and a very playable one. You don't even have to be interested in trains to enjoy this one.

There's a certain sense of achievement as you watch the towns build up around your cities and you forge huge, expensive (but lucrative) links across the Alps or from coast to coast.

5 SWORD OF ARAGON – I'm sure that a lot of you will have never heard of this. It was a sort of *Kingdom* game, but with a war/strategy element. The best thing about it was that you had to recruit and train your troops, then equip them with a vast array of armour and weapons. Individual units had their own morale and skill levels.

As units could be customised to this level, you could have all types of people for all types of eventualities. If you ever see this game, buy it!

6 WINGS – A flight sim of sorts, this Cinemaware classic is set in World War I. Initially, you have to prove yourself by flying a mission, then you join up with a squadron.

Although all the missions are planned out for you, there's a good mixture of action, from shooting down different planes and balloons to bombing and strafing runs. It's all presented in the form of a journal, which is very nicely done.

7 HISTORYLINE – BlueByte's excellent World War I game is hard to beat. Although it's very, very, very slow when playing against the computer, it's an intriguing game. Although it isn't really an accurate simulation of war, it is an excellent strategy game.

8 COLONIZATION – Yet another Sid Meier game. This was really a sequel to *Civilization*. A lot of people think it was just a cynical cashing in exercise, but I think it's better than *Civ* in many ways. Although there's nothing to research, etc, it's demanding to build broad-based economies for a stable income, and then there's the question of how you deal with the natives...

9 UFO: ENEMY UNKNOWN – Julian Gollop is a jolly clever chap. *Laser Squad* was also one of my all-time favourite Amiga games, but this was even better. Although sometimes the non-mission elements of the game got a little tedious, it was great being able to research new weapons and investigate the alien technology.

I much prefer turn-based strategy to the current passion for real-time stuff, which is in many ways just as unrealistic.

10 STUNT CAR RACER – Geoff Crammond programmed this classic long before *F1GP*. The aim was simply to drive your stunt car around a variety of wacky tracks without falling off. It really came into its own in the head-to-head link up where you could bash a friend off the track with some cunning driving.

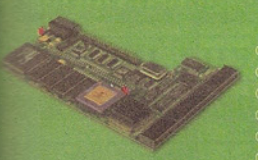
This was actually the way we used to settle editorial arguments years ago when I worked on *Amiga Computing*...



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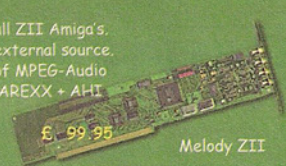
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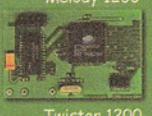


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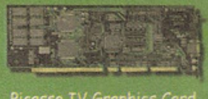
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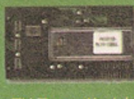
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Ariadne II

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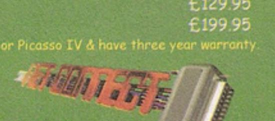
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SCREENPLAY

The latest games, hints and some clever programming from you!



Although the games section may be looking a bit sparse this month, there's a reason behind this foolish photo (and it's not just Colin's vindictive streak, for a change).

Anyway, we're all excited here at AF Towers because there's a finished, complete and spankingly gorgeous copy of ClickBOOM's *Napalm* on it's way to us right now.

Unfortunately, it'll arrive too late to make it into the ScreenPlay pages this month, but that just means we'll have even more time to play it.

Don't miss next month's definitive review of what looks like being one of the best games to grace the Amiga in a long time...

Mark Wheatley

AMIGA FORMAT'S REVIEW POLICY

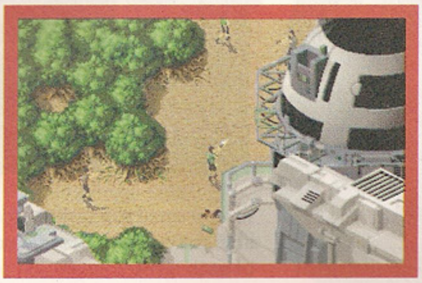
WHAT OUR REVIEW SCORES MEAN

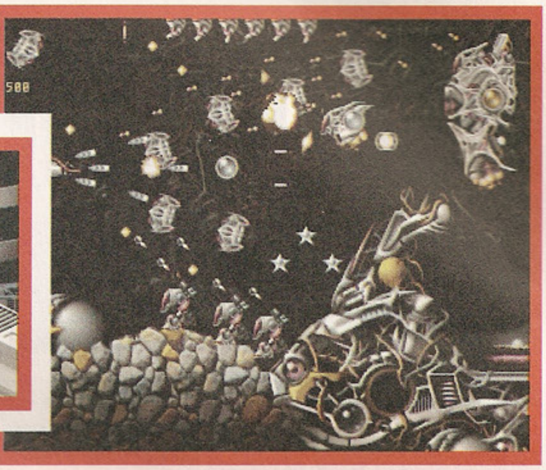
Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up to date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

90+%	The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold – the most highly prized rating there is.
80-89%	These games are very good, but due to minor flaws they're not the finest examples of their genre.
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60-69%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
50-59%	Below average games which are unlikely to impress your mates or your wallet..
40-49%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Under 40%	The absolute pits.

30 PREVIEWS

We can't predict the winning whippets, but we know what you'll be playing...

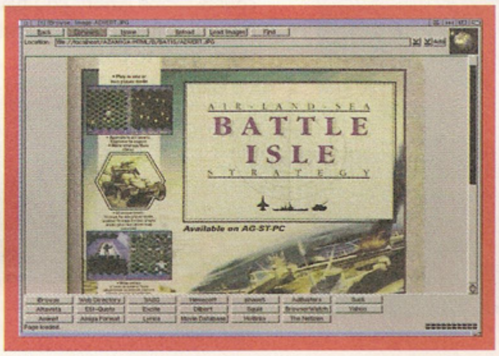




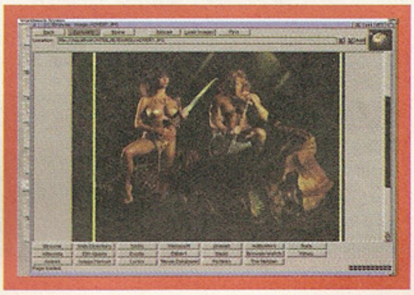
Distant Space (above) and *T-Zer0* (right) are two of the great-looking games in Previews.

32 A-Z OF AMIGA/SPECTRUM GAMES

Nick Veitch looks at these compilations of information and games.



All the cheats and facts you need to know.



Hands up who remembers *Barbarian*?

34 BLOCKHEAD

Ben Vost collects fruit in a pot in this puzzler.



Progress round the path by solving puzzles.

35 WIP

Stuart Walker shows off the latest additions to the almost completed *Space Station 3000*.



A station. In space. In the year 3000.

36 READER GAMES

A mixed bag of clones and original ideas, all programmed by *AF* readers.

Mars War. .... David Ball
Fight it out for planetary domination.

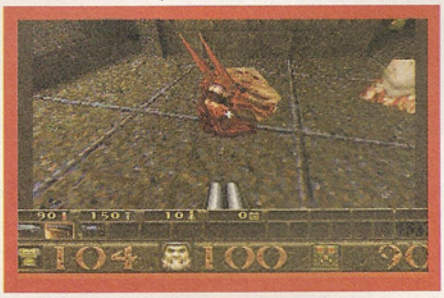
Bust a Marble. .... David Ball
Fire marbles in this *Bust a Move* clone.

Getsome 2. .... A. Cole
Death by Kenny? Hmm.

Xhess. .... Joona Palaste
A fiendish version of Chess.

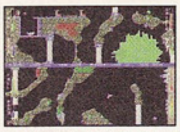
38 GAMEBUSTERS

Ben Vost shows you the secrets of *Quake*.



One nasty who won't be causing any more trouble.

Previews

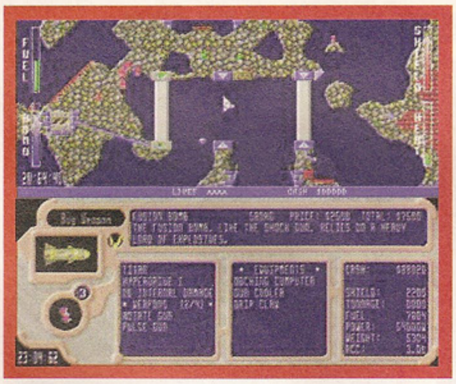


Nick Veitch brings us news on the latest clutch of new games currently simmering on the development stove.

Phoenix Fighters

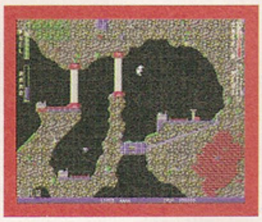
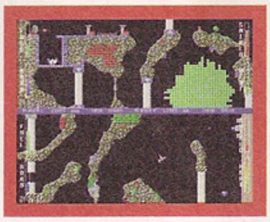


Thrust and Gravity Wars live on in this new take on mission-based delta craft blasting. In caves.



Alive mediasoft have told us that they've signed a new game called *Phoenix Fighters*, a tactical shoot-em-up. Apparently this will follow a mission-oriented structure which will involve completing several small sub tasks before being able to complete the main objective of each level.

There are also a number of different styles of play, including a race option where you simply have to reach the exit of the level in the fastest time, as well as an obstacle course mode where you have to fly around collecting gems and bringing them back to base.

There will be missions to perform, as well as simple blasting.

All of these modes can also be played two-player using a split screen. All in all, there will be around 200 different levels to play through. Players will have a choice of 20 different ship types and fifteen different weapons, with upgrades available through the time honoured 'collecting gems and going to the shop' method.

It should be fast paced too, with 128 colours on screen, which the developers assure us will run consistently at 50 frames per second, even on low-end CPUs.

One way doors, force-fields, teleporters, exploding walls and organically growing objects mean the gameplay should be pretty interesting too.

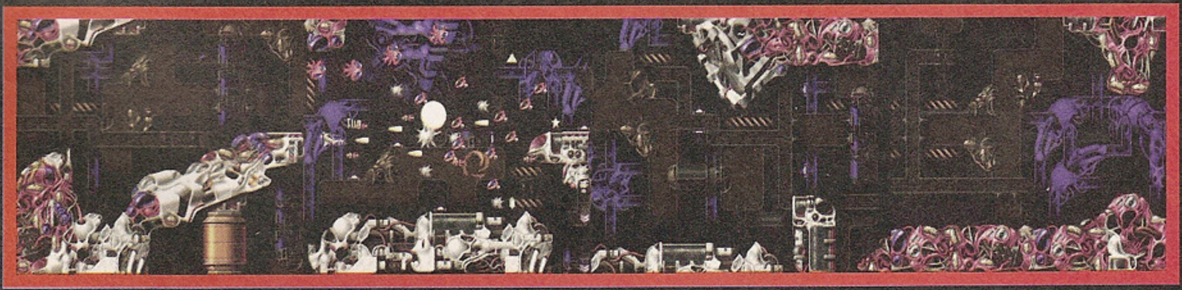
The most astounding thing about this game is that it promises to work on a vanilla A500 with OCS and a 0.5Mb expansion. Users with an '020 or above will be rewarded with extra features, but *Phoenix Fighters* should run on just about any Amiga, even old Kickstart 1.2 machines.

If you'd like to pre-order *Phoenix Fighters* now (it will cost £14.99), you can contact Alive via email at: stevenalive@innotts.co.uk

T-ZerØ

The biggest news this month is that clickBOOM have signed up *T-Zer0* from Italian developer Simone Basearato. *T-Zer0* (formerly *TraumaZero)* looks like being one of the most graphically appealing and technically astounding shoot-em-ups on the Amiga for some time, so there's no wonder it was signed by the masters of the polished pixel.

T-Zer0 aims to be a bit more than your standard blaster, though. Animating at 25 frames a second, it'll



While there are certain R-Type nuances, this game is hoping to redefine the genre.

Distant Space

Remember a game we featured here a while back called *Wasted Dreams*? Unfortunately, the group originally creating it had financial problems, but now the whole thing has been taken up by Digital Dreams Entertainment and renamed *Distant Space*.

To recap, it's a one or two player arcade-adventure set in a future of chronic unemployment where crime is rife and Earth's inhabitants are looking for a new planet to move to. The player assumes the role of a crew member aboard a colonisation ship which then crash lands on a promising-looking planet.

The game isn't too heavy on system requirements. You'll need an AGA machine or an Amiga with a graphics card, a CD-ROM drive and at least 3Mb of free RAM, which isn't too much, really.

Distant Space should actually be ready for release by the time you read this, but the developers are still trying to tie up a distribution contract so you may have to wait for a couple of issues for the review.

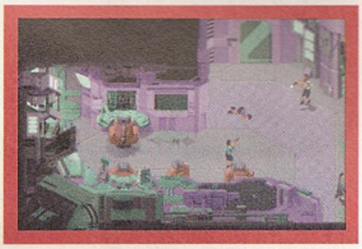
If you want more information, try the Digital Dreams website at: http://www.dd-ent.com



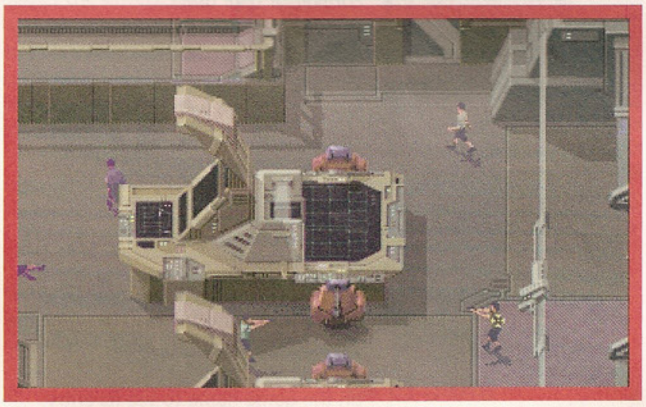


In space, especially distant space, no-one can hear you ask for directions.

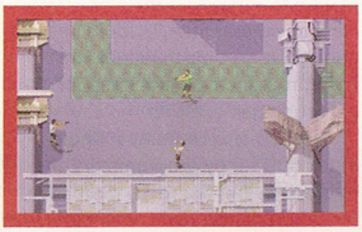




There is a demo of Distant Space, but it's essentially the same as the Wasted Dreams one.





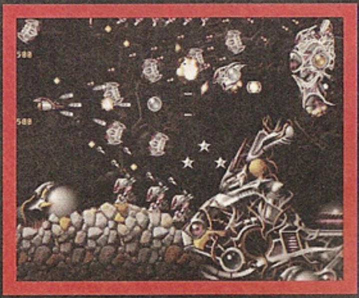


The final scene from The Good, the Bad and the Ugly reprised in space.

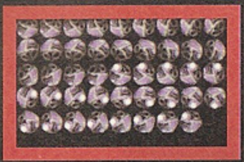
be based on 256-colour graphics (so AGA is required) and will include loads of effects, including translucency around explosions, etc. This is a pretty tricky prospect when dealing with over 50 animated objects on screen at once…

Games don't all come down to graphics though, and *T-Zer0* seems to have a lot going for it in the gameplay department too. With simultaneous two-player action, Arcade, Story and Battle modes and 50 different weapon types, there should be a lot to keep serious gamers interested.

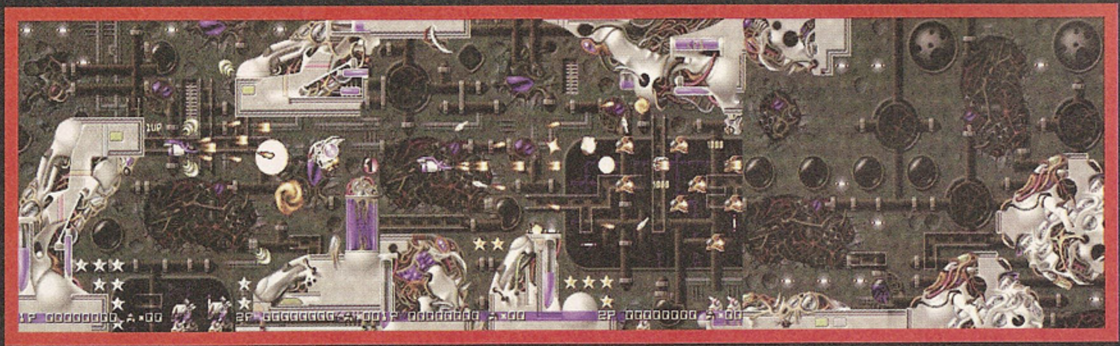
As usual, we can only show you the screenshots here, but we're looking forward to its release. In the meantime, you're sure to be able to pick up more information from the *T-Zer0* website, which can be found at: http://www.clickboom.com







Loads of animation frames (above) don't automatically make a great game, but we must admit it looks excellent.

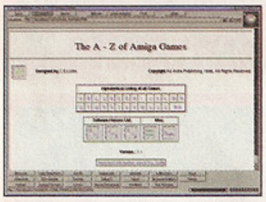


A piece-together of one of the level sections (left) shows just how hectic this game will be.

The A-Z of Amiga Games

Rediscover hundreds of Amiga games as Nick Veitch takes a walk down Alphabet Street.





The interface is a bit basic (above), but there are plenty of nice graphics, like original game adverts (top).

This is such a simple idea it's a wonder that nobody thought of it before – an extensive guide to as many Amiga games as you can name, all on one CD. As it is written in HTML, the CD will work equally as well on a PC, which may be of use to some *Amiga Forever* or *UAE* users.

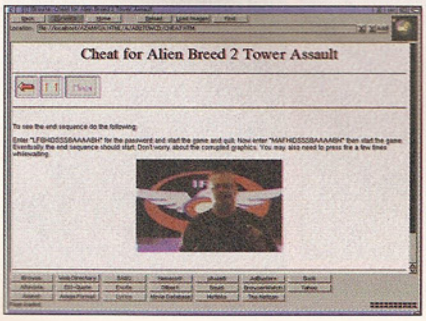
You'll have to provide your own browser though, as there's no demo or Shareware web software on here at all. Most Amiga web browsers will be able to handle the pages as they're fairly simple in layout. Thankfully, they're not graphically over-designed either, so there's a reasonable chance of being able to display them before you get bored.

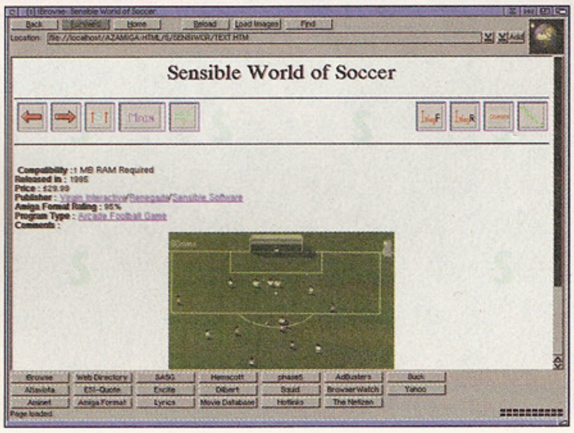
Navigation is fairly simple. There's a separate listing for each letter of the alphabet. Click on the letter to get an appropriate list of games, then click on the game name to see its entry.

> **A lot of the games have a screenshot, which is nice, although the quality of these is a little variable...**

A lot of the games have a screenshot, which is nice, although the quality of these is a little variable to say the least. Occasionally there will be further image links for box artwork and original advertising, which is very nice.

Cheats aren't available for every game, and some of them are less than comprehensive.

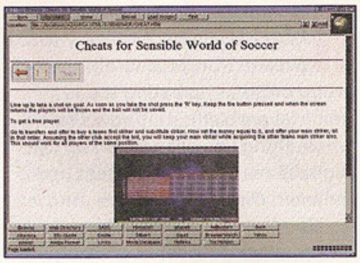


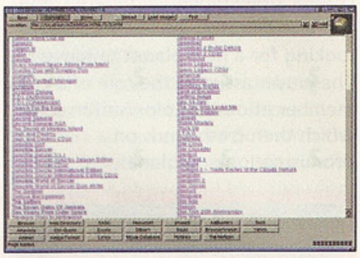


For a well known game, the entry usually includes information on the publisher, programmer, genre, original price, year of release and review score (from *Amiga Format*, naturally). What it lacks is any sort of summary about the games themselves. Even thirty or forty words saying: "The original God game by Peter Molyneaux which established Bullfrog as a publisher and defined a genre. Guide your followers, with the use of terraforming, thunderbolts and the occasional plague to conquer territories as you combat other deities," would be enough. It isn't much help if you're trying to remember the name of a particular game, either.

The CD also contains a whole index of titles by programmers and publishers. This is a really good idea, but it could have been extended a bit. There's no biographical info on programmers and no corporate info on publishers, nor is there any info about whether they still exist.

Overall, this CD has a good structure but there are rather too many gaps in it. Many of the titles listed have no additional information at all, and many are missing things like programmer names and publishers. A reasonable number of them have screenshots, but the number of cheats available doesn't seem to be particularly extensive.





There are thousands of games listed here, but not all have useful information.

A lot of work has obviously gone into this, but as it stands it just isn't quite good enough. Ad Astra will be updating, expanding and correcting the content of this database though, so perhaps future versions of the CD will be more worthwhile.

DEVELOPED BY: Ad Astra
SUPPLIED BY: Epic Marketing (0500) 131486
PRICE: £19.99
REQUIRES: CD-ROM drive, web browser

Pros and Cons

- \+ Thousands of games covered.
- \+ Lots of screenshots.
- − Many entries incomplete.
- − Very few comments.

OVERALL VERDICT:
A lot of work has gone into it, but it still isn't close to being complete.

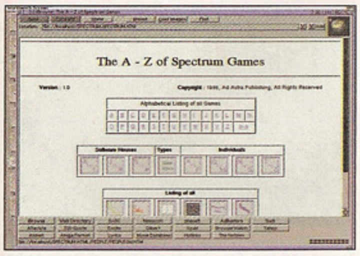
60%

The A-Z of Spectrum Games

AMIGA GOLD FORMAT

Hundreds of Speccy classics wait to be discovered by Nick Veitch.

As you might expect, this CD is pretty similar, in general terms, to the Amiga one. Once again it's presented in a fairly basic HTML format, with games listed alphabetically, including sections for software houses, programmers, genre and so on.



The interface is rather similar to the Amiga A-Z, but there's a lot more information included.

Again, the design of the pages is a trifle on the dull side, but at least this disk is very much more complete. Most of the games have a decent description and one or two screenshots. Many also have cheats, maps where applicable and a large number have original artwork too, such as adverts or inlay cards.

Although sometimes the maps are just hand-drawn ones and the ads and inlays have been scanned in with variable results, this somehow just adds to the charm.

A lot of the game entries have full instructions too, with key definitions and so on, which is really handy if you have an emulator. Speaking of which...

Also included is the rather excellent *ZXAM* Shareware emulator which is very good indeed. It handles all sorts of different game image formats, as well as coming in AGA and non-AGA versions. You can even run at top speed or at the original Spectrum speed.

If you remember the old days of Spectrum gaming, you'll no doubt remember the old games too. The names *Lords of Midnight*, *Choplifter*, *Chase HQ*, *Uridium* and *Darkside* will probably conjure up visions of happier times when games were playable and rumble packs hadn't been invented.

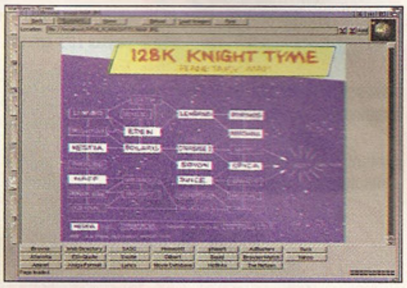
The name *Daley Thompson's Decathlon* will probably just conjure up visions of broken keyboards and joysticks, but it's here too, along with the games mentioned previously and hundreds of other classics.

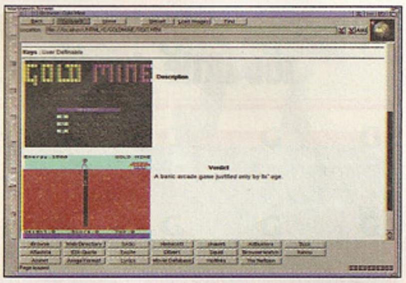
Some of the games won't work with the emulator because the relevant data files haven't been included, but almost all of them will run on the supplied emulator with no problems. Games which come in two parts or have associated loaders are usually sectioned off in their own directories, which does make things a little easier.

The inclusion of the games themselves (although obviously not possible on the *Amiga A to Z* CD for legal reasons) is what makes the difference here, as you can completely re-live the experience and not just gaze wistfully at the screenshots...









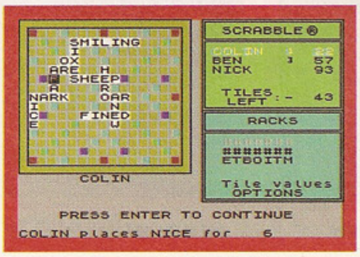
I wonder what the chap who wrote this game is doing now...

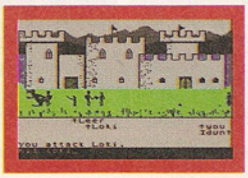
> **The name Daley Thompson's Decathlon will probably just conjure up images of broken keyboards and joysticks...**

Can you name all the games pictured here? Drop me a line and you might win a special prize!









SUPPLIED BY: Ad Astra, PO Box 90, Leeds, LS11 8XU. Email ma@adastrauk.com

REQUIRES: CD-ROM drive, web browser

PRICE: £19.99, or £35 for both it and the A-Z Amiga CD

Pros and Cons

- \+ Thousands of games covered.
- \+ Lots of screenshots and tips.
- \+ Emulator and games included.
- − The design is a bit dull.

OVERALL VERDICT:
A tremendous effort which will be well appreciated by those with a nostalgic bent.

90%

Blockhead 2

Ben Vost gets into a jam with this fruity puzzler.

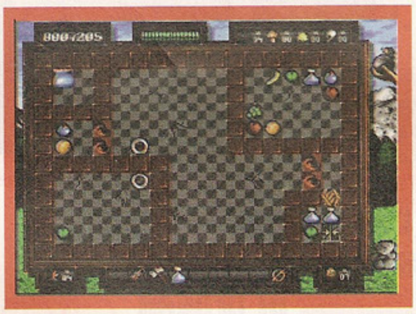


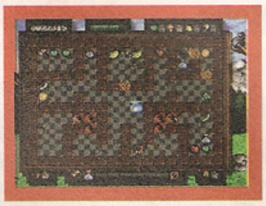
Level codes make the game less frustrating to get through.

Although we're light on games this month, it's good to have a cheapie title like *Blockhead 2* to play with. It's simple, doesn't take up much room on your hard drive, you can run it from the floppy it comes on and it's great for a quick play.

The idea is basically *Boulderdash* meets, hmm, the bit in *Tomb Raider* where you have to drag blocks around, with the overhead perspective of *Valhalla* or *Final Odyssey*.

> **"You'll tear your hair out as you try to work out how you can possibly complete a level with too little dynamite..."**





What you have to do is put some green berries (they look like apples to me) into your cauldron and, once you've put enough in, move the cauldron to the exit. However, there's a catch. There are no monsters at all, but there is a strict time limit which makes it somewhat harder, and there are walls to navigate. Also, you can't study the screen when paused because, curses, the authors have blanked the screen when pausing.

The learning curve for the game is nicely paced, with new levels





introducing new perils and harder puzzles, some of which seem really impossible to begin with but become obvious with repeated attempts. You'll tear your hair out as you try to work out how you can possibly complete a level with too little dynamite, or with too many "red eye" tiles to cross to stay alive.

There isn't very much to say about this game really. Although you could spend an age waiting for it to give you a password, don't do that – just keep a careful note of the names of the levels (hint, hint).

Also, on the cover of the box the game has "100 frustrating levels!" as its subtitle, but the instructions for the game state that there are 40. It doesn't matter much since in the time I've played it I haven't got to the end yet, or indeed anywhere near it.

One last thing about its system friendliness. Although the game can be played from its self-booting disk and you can also play it from your



As you can see, the variety of different items to be collected makes for a colourful and varied game.

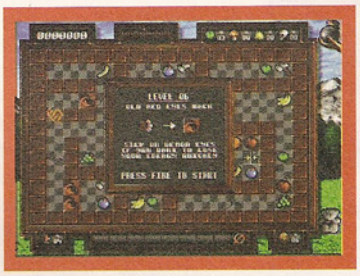
hard drive, it doesn't have an icon for the game itself, which is a bit poor.

While you can't multitask while playing the game, it does quit back to Workbench nicely at any time, so you can always leap out and back in again since, as you'd expect from a game that only takes one disk, it doesn't take long to load.

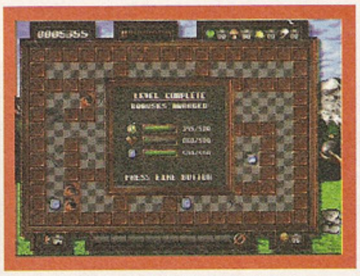
Right. Now, if you'll excuse me, I'm off to try to complete that tricky level again...



This shows you how far along the path you've got to go before the end of the game.



At the start of each level you get instructions on just what you have to do...



...and at the end of a level you get your score.

SUPPLIED BY: Epic Marketing (0500) 131486
WWW: http://www.epicmarketing.ltd.net/
PRICE: £7.99

Pros and Cons

- + Very addictive and frustrating.
- + Simple gameplay, but requires thought.
- + Cheap!
- − No icon for the game.

OVERALL VERDICT:
Excellent value for a thoroughly irritating and addictive game.

85%

Space Station 3000

Work In Progress

Digital Images' Stuart Walker explains the detailed artificial crew intelligence system as the game nears completion.

The *Space Station 3000* WIP series is back, and the game is really starting to take shape. The most important thing is the work which is being carried out on the 3D graphics engine and the graphic improvements throughout the game.

Space Station 3000 will now feature some impressive 3D combat at very fast speeds, even on a 68030. Crew members will also all have their own skills and abilities. Some crew members will be skilled at their jobs but some may make mistakes and may also be slower to perform tasks.

Some crew members may also have poor discipline. If this is so, they may try to steal equipment from the space station, or even steal one of your starships. If they steal a starship, you will have to disable and recover it. As for the member of crew who has committed the crime, it's up to you how to punish them. Will you fire them? Will you torture them? You could even kill them if you've decided that you never want to see them again. If you fire them, they may come back at some point, maybe in a few years, with a huge battle cruiser (which they may have stolen or bought out of good financial fortune) and may want to pick a fight with you. If you torture them, they'll probably hate you and, again, they may leave and return later to try to kill you.

Alternatively, they may accept that what they did was wrong and may never do anything wrong again. You don't even have to punish them if you wish, but if you don't, they'll probably try to steal something else.

We're hoping that *Space Station 3000* will be released by March, and a demo should be available shortly before then.





The designers of the game promise high-speed 3D space combat, even on 68030 processors.

> "...it's up to you how to punish them. Will you fire them? Will you torture them? You could even kill them..."





Crew members: maybe they're hard at work for you, but maybe they're plotting to steal some of your equipment. How will you react?

Contacts

Digital Images' homepage:
http://www.digital-images.demon.co.uk.
We also have two mailing lists, a full list and an announce-only list.
Subscribe by sending a blank email to:
Announce Only:
digital-images-news-subscribe@egroups.com.
Full: digital-images-subscribe@egroups.com.
If you have any questions, you can email them to: info@digital-images.demon.co.uk.



Ordering

Space Station 3000 **can be pre-ordered direct from our publishers, Blittersoft, from their website at http://www.blittersoft.com or by telephone on 01908 261466.**

Valentine's day has just passed, and Mark Wheatley has fallen head over heels in love with the cheeky little scamps known as the...

Reader Games





AFCD37:-ReaderStuff-/-ReaderGames-

Despite the lack of new commercial games over the last couple of months, there's been no lack of homegrown efforts, some of which could easily compete with the professional products. Okay, they may not look or sound quite as good, but when it comes to the essential gameplay that really makes a game a classic, some of your efforts are way ahead. Good graphics can't hide a poor game, but if your game has the playability that endangers joysticks, keeps you up all night or stops you from working, the extra embellishments can be added later.

We offer you the chance to get the advice of the *AF* team so you can improve your games, and we offer £50 to the author of the best game each month, so get coding and read on.



Game of the Month £50 Winner! Mars War



This is a demo of David's *Dune 2*/*C&C* clone, and pretty good it is too. You play against another person, one as the Martians, one as people from Earth. As usual in these games, you start off with a home base and you must decide what to build in order to improve your strength.

The varying terrain might make it more appropriate for you to concentrate on ore mining or water purifying, but make sure you keep an eye on the split-screen so you know what your opponent is doing – it's all too easy to be building up your base while they're sneaking droids around your defences. Blow up their base and it's victory for your planet.

We always stress that if you're going to do a clone of a game, you should add something new (see David's attempt at a *Bust a Move* clone on these pages...) but it has to be said that *Mars War* doesn't particularly expand on the genre. However, it looks nice, with basic backgrounds and realistic buildings and robots. It moves well too, with smooth scrolling and nippy vehicles, and the inclusion of a waypoint system of moving them is an appreciated touch.

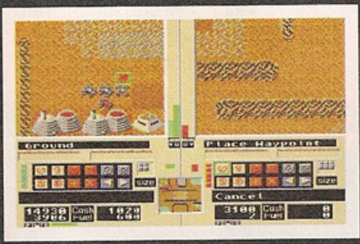
Mars War really is almost identical to most other games in this genre but it retains the gameplay of the best of them, and that's what really counts. Once you're on your megalomaniac path to planetary domination, nothing's going to stop you, especially with a control system that's as fluid, intuitive and easy to use as the one that's included here.

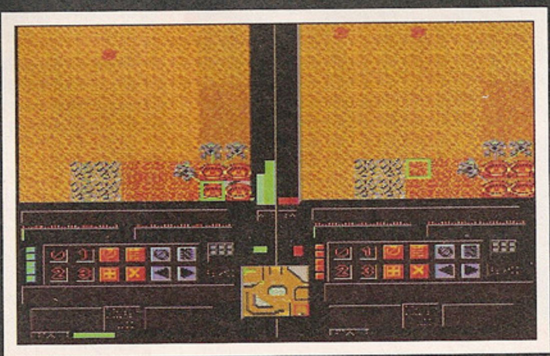
Despite being soundly thrashed by Ben in every game I played, *Mars War* is definitely one I'll be coming back to, if only to wreak my revenge. This is only the demo version as David plans to expand the game considerably, but even this version is a worthy winner of the reader prize this month.

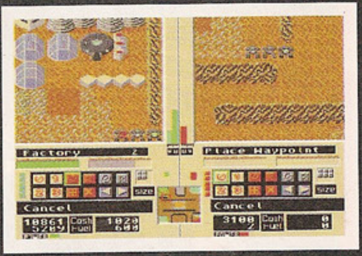




Right and below: my base being annihilated by Ben's Martian forces. Again...







AUTHOR: David Ball
LANGUAGE: Blitz Basic 2
VERDICT: A great, addictive clone that will keep you entertained for hours.

READER WARRANT

When you're sending in your submissions make sure you also give us:
1. An address where you can be contacted.
2. Details of the language used to create the game.
3. A recent photo of yourself.

The address to send your stuff into is:
Reader Games • Amiga Format • 30 Monmouth Street • Bath • BA1 2BW

Everything included on the *AFCD* must have a reader warrant with it. Just cut it out off this page, sign it and send it in to us with your game and a recent photograph of yourself. A last reminder: if you don't include this warrant we simply won't be able to put your game on the CD – that means you won't be able to have it judged by other readers.

In respect of all material which forms my reader contribution to Future Publishing's *Amiga Format*, I hereby warrant that:-
1. The material is original and does not infringe any other material or rights;
2. The material does not contain any material which is defamatory, obscene or indecent and is exempt from classification under the Video Recordings Act 1984;
3. That there are no legal claims against the material provided;
4. That I have full power and authority to provide this material to Future Publishing.

Signature: ______________________________

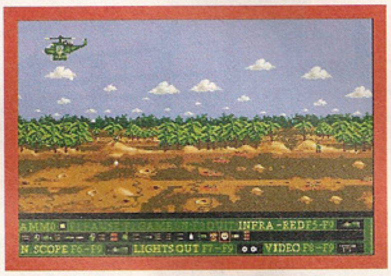
Getsome 2

The original Getsome appeared in issue 119 and its bloodthirsty *Revenge AGA*-style comic carnage certainly went down well. It has now been updated and several of the recommendations from that review have been implemented.

For a start, the graphics have all been polished up. There's now a bar with a little icon showing which weapon you have selected, and the array of weapons is now even more impressive; as well as your usual grenades, rocket launchers, guns and milk bottles, you've got Sting (again, but you never tire of dropping him to his death) and even Kenny from *South Park*, accompanied by a little scream as you pelt the enemy with his tiny body.

There's also the added challenge of rescuing your own men, who will all too often be bombed as they look very similar to the enemy, and the screen now scrolls a short way to the left and right, enabling you to chase after any fleeing soldiers. You can change to Infra Red mode, which basically just turns the screen red, and you can play at night, too.

Overall, *Getsome 2* is a huge improvement on the original. The added little touches will certainly keep you playing for longer, but I'm still not sure if this'll be one that you'll keep booting up for weeks to come. The reason is that there's still not enough feeling of challenge, of an objective to achieve. You're still basically just laying down a line of fire and hoping the enemy will run into it, before nipping about to pick up some of your own chaps. Perhaps some incoming fire from the enemies or more specific objectives would make it a bit more alluring. As it is, it's much improved and if you fancy shooting people to a pulp, you'll have a good time with this. Keep improving it though, Mr. Cole, as it's certainly getting better.

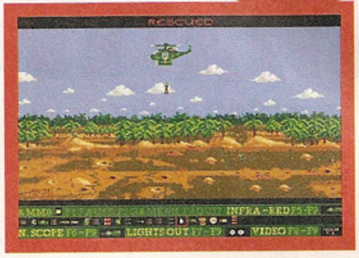






Some of the new features include little Kenny's to drop on the enemy (inset) and Infra Red vision (below right).





AUTHOR: A. Cole
LANGUAGE: Unknown
VERDICT: Still a bit limited, but greatly improved short-term bloodthirsty fun.

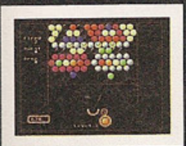
Bust a Marble 3

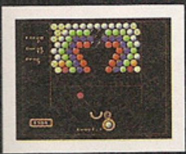
Unfortunately, David's other clone, a version of *Bust a Move*, displays all the points we complain about every month. Fair enough, it's brightly coloured, it's smooth and it works, but it's just a very basic version of the original, only not as addictive or as fun.

You have a cannon at the bottom of the screen and must fire coloured balls upwards. Hit a cluster of at least two other balls of the same colour and they'll disappear, and the aim of the game is to clear the screen. It's a simple concept that proved highly addictive on the original, but which seems slow and dreary here.

Having to use the joystick doesn't help either as it makes aiming even fairly simple shots a matter of chance, and it can become very frustrating very quickly.

There really isn't anything else to say about this. You'll have played a version of it before, and you'll have played a better version of it before. This needs a better control system, more things going on and, technically speaking, more oomph. David's *Mars War* is the way clones of games should be done...





AUTHOR: David Ball
LANGUAGE: Blitz Basic 2
VERDICT: Looks nice, works well, moves smoothly, is duller than a Bill Gates speech.

Xhess

This is a total contrast to the mindless blasting of *Getsome* as *Xhess* will take a lot of thought and concentration.

If you can play Chess, you'll have a great head start as it's basically a two-player game of Chess made more complicated. You still have the usual 64-square board, but each square is then split up into a 2x2 square. Your pieces (called a Basic, Ortho, Diago, Jumpr and King) can all move individually, but may not take pieces if they do. However, they can combine to make other pieces.

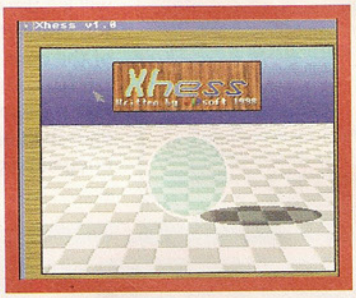
For example, a Pawn requires at least two Basics, a Rook needs at least one Ortho and a Bishop at least one Diago. These pieces may then move as one to take opposing pieces, provided you have the numerical advantage. For every piece you lose, you lose money, and you gain money for every piece you take. This money can be used to buy you more pieces.

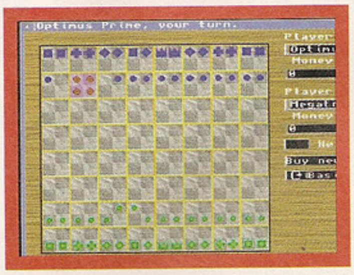
Sounds complicated? You're right, it is, but after a few games you'll soon get the hang of it and it makes a superb variation on the traditional game of Chess, leading to whole new tactical considerations. If you like games that take a lot of skill, thought and cunning then you'll love this and will find yourself really getting immersed in the gameplay.

Xhess would be improved if the pieces were a little larger, and a little clearer. The option to change the colours of the board would be welcome too, as you'll be staring at it for quite a while as you battle it out.

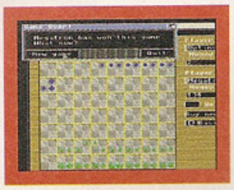
Although it would be extremely difficult to program, a one player mode is almost expected in Chess games, so you can practice and improve (i.e. get soundly thrashed by the computer), and so it's missed here, although playing against another person in a battle of wits is always more fun.

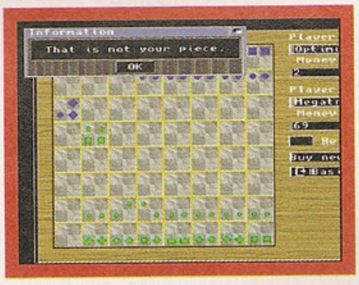
Quite why the two opposing players are named after the leaders from *Transformers* (robots in disguise, if you can't remember the cartoon), Optimus Prime and Megatron, is quite beyond me, though...





Four of your pieces can be linked together to form another piece, which can then be moved as one.





The pop up information bars are really useful while you're trying to work out all the rules.

Megatron wins a quick game, but I still don't remember Transformers playing board games very often...

AUTHOR: Joona Palaste
LANGUAGE: C
VERDICT: May take a while to work out, but one you do, you'll definitely be hooked.

Gamebusters

THE COMPLETE Quake SOLUTION PART 2

Are you ready to rumble? asks Ben Vost.

You'll start in a room with a grunt down the stairs below you and an ogre across a bridge. If you've got the double-barrelled shotgun from the previous chapter, one shot will kill the grunt if you move to the top of the stairs, and a few will get rid of the ogre.

Now, you can do this level in a very strange order, but we're going to do it the traditional way. Cross the bridge and go up the stairs. You'll be in an ante-room to a hall with three bits of floor going the length of the hall. There are bad guys on every one so shoot them all. You can jump across to get the green armour if you like, but there's a more fun way of getting to it that finds one of the secrets.

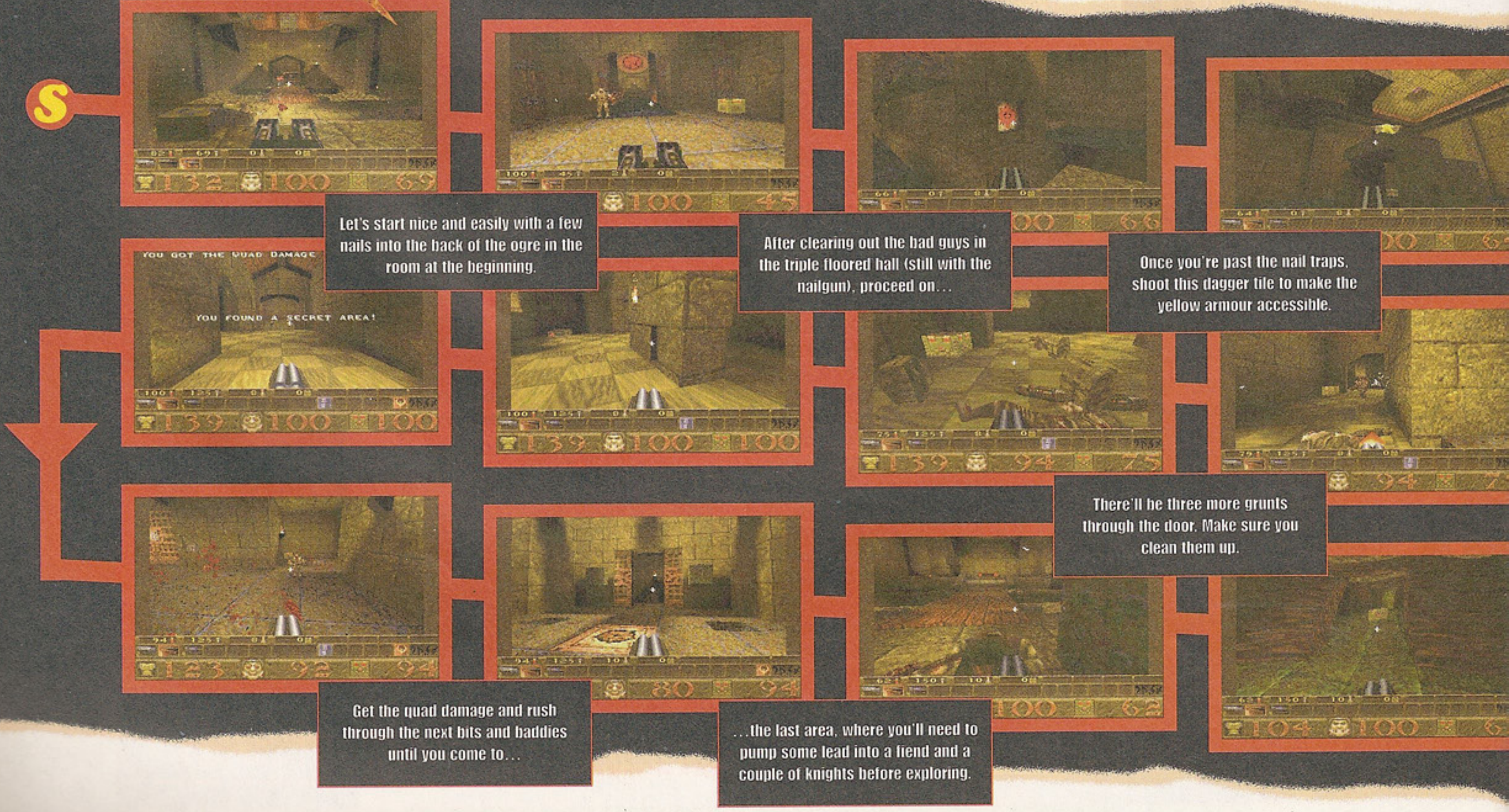
Collect the packs from the dead baddies as you go through the hall and head to your left. Go back into the hall, but this time on the left-hand side of the floor and get the double-barrelled shotgun. Go through the doorway, but watch out for the ogre immediately to your right and the one coming along the walkway.

You might want to backpedal out of this room and back to the middle walkway in the hall where you can safely shoot both ogres while their grenades splash into the water between you.

Going along the walkway in the room where the two ogres were, you'll come to two nailtraps. Make sure you have "always run" turned on and step lively between the hail o' nails. You'll come into a room that has a weird structure in the middle, a sun dagger logo on the wall and a set of stairs leading from it.

Shooting the sun dagger tile will open the odd structure in the middle of the room, allowing you to jump your way up to the top of it to get the yellow armour. The two grunts will come down the stairs from the room so pump 'em full of lead and carry on.

Go up the stairs which will lead into a big room. The walls on the left will drop down and you'll be confronted by three knights. Since they don't have ranged weapons,



Let's start nice and easily with a few nails into the back of the ogre in the room at the beginning.

After clearing out the bad guys in the triple floored hall (still with the nailgun), proceed on...

Once you're past the nail traps, shoot this dagger tile to make the yellow armour accessible.

There'll be three more grunts through the door. Make sure you clean them up.

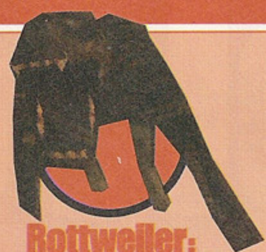
Get the quad damage and rush through the next bits and baddies until you come to...

...the last area, where you'll need to pump some lead into a fiend and a couple of knights before exploring.

BAD GUYS SO FAR



Grunt:
Your basic enemy. Just keep moving so that his shotgun shells don't hit you. One shot from a double-barrelled shotgun at a reasonably close range is enough to despatch him.



Rottweiler:
Nice doggie! Keep shooting and moving because their bite is worse than their bark. Again, one good hit with the old double-barrelled shotgun will be enough to send him to doggie heaven.



Knight:
He can't hit you if you don't just stand there, so make sure you run backwards and keep shooting. They're a bit tougher than grunts, though.



Ogre:
These are much worse. Stay out of range of their grenades and don't believe them when they fall over until their pack appears. They'll give you two rockets which double as grenades.



Fiend:
These are extremely nasty indeed so stay out of the way! They're very fast and dangerous, so stay at long range – the nailgun is a good weapon to use here.

just keep retreating and shooting and they should cause you no harm. Don't hit the inviting button just yet. Instead, go around the corner to where you can see the silver key and drop down. You'll get a health and a box of nails.

There should be an open doorway to your right, and you can explore all around this murky, watery part of the level. Walk forward and a door should open in front of you that leads to a slipgate. This puts you on the third bit of floor in the first hall, so get the shotgun and armour (if you can have green armour since you already have yellow), jump to the middle bit of floor and head back to that button I said you shouldn't push.

Push it now and a bridge extends so you can get the silver key. Go back along the bridge with the nail gun armed since once you back into the key, the doorway that should be in front of you will open and a grunt will appear. Shoot him dead.

There'll be three more round the corner. Once you've killed them you'll go into a room with arches on the left-hand side. Go through the first arch, look to your right at the central pillar and you'll see a large block sticking out. Hit the block and a door behind you will open, revealing a quad damage.

Before you get it, beware! You're going to need to move fast now, so read this bit first and remember the instructions, otherwise the quad damage won't last long enough and you'll have a lot of hard work to do.

Right. Get the Quad damage, go down the stairs at the end of the room (on the other side of the arches). Kill the grunts. Open the silver key door. Kill the ogre. Kill the other ogre, press the tile and a door will open revealing a fiend. Shoot him before your quad damage runs out (with the double-barrelled shotgun) and you should be able to frag him with two shots. If not, head for the corners of the room where there are slipgates. They'll put you on the roof of the building in the room where you can shoot the fiend at your leisure and pick up a few things.

Jump off the building and go through the doorway into it. There are two knights in there so just blow them away and you can go through the exit door.

Before you do, go back to the start of the level and walk off the bridge in that first room. You'll find a box of nails under the bridge, and if you look at the wall closely you should see a discoloured block which you can shoot. This will then reveal the third secret.

You can now wander around under the level through these tunnels and discover the more unorthodox way of completing it. AF

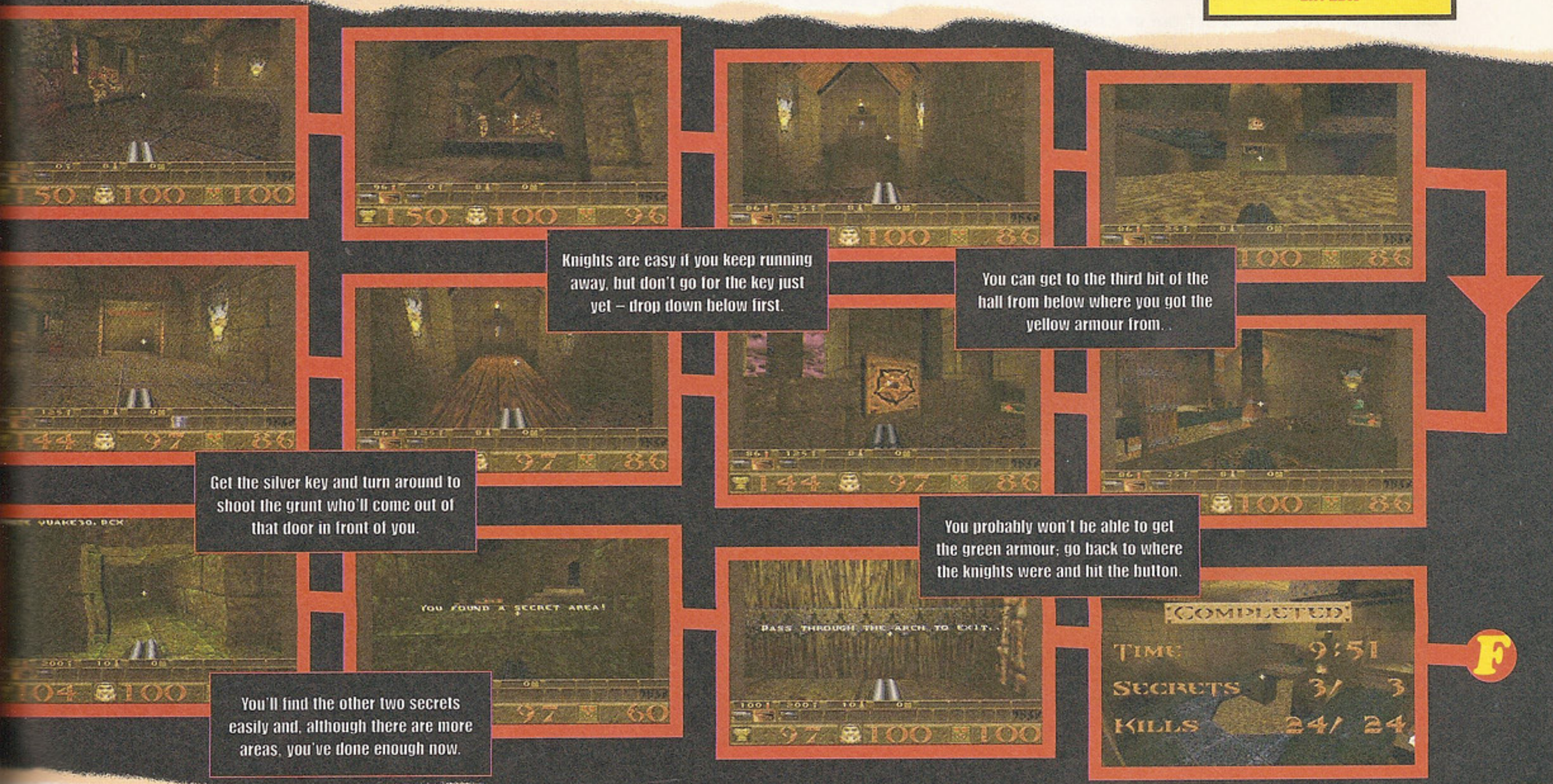
SEND US YOUR TIPS!



If you've got some hints, cheats, tips or general good advice on any Amiga games – especially some of the newer ones like Sixth Sense Investigations or whatever, then don't keep them to yourself – send them in so we can pass 'em on to other gamers out there who might be having more problems than you.

Also, if you've got a query about a game (and no, we don't really mind people asking about The Secret of Monkey Island), then drop us a line and we might be able to answer it in Helping Hands.

HELPING HANDS • Amiga Format 30 Monmouth Street • Bath • BA1 2BW



Knights are easy if you keep running away, but don't go for the key just yet – drop down below first.

You can get to the third bit of the hall from below where you got the yellow armour from..

Get the silver key and turn around to shoot the grunt who'll come out of that door in front of you.

You probably won't be able to get the green armour; go back to where the knights were and hit the button.

You'll find the other two secrets easily and, although there are more areas, you've done enough now.



PD Select

Dave Cusick trawls through another PD and Shareware mailbag in search of some more choice catches…

PictIcon v1.4

BY: Chad Randall
WARE: Free
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: 1
PRICE: £1 + 75p P&P

One of the nice things about the Amiga Workbench is the fact that it enables you to assign unique icons to individual programs, folders and documents if you see fit to do so. Long before Windows95 presented PC users with this capability, and while the Atari ST was still serving up a paltry selection of preset monochromatic icons to a considerable proportion of home computer users, Amiga owners were designing fancy icons for their favourite applications.

One use to which this capability can be put is in providing thumbnail representations of image files, so by taking a look at the icon in a Workbench window, the user can see what an image file is, without having to load it into a graphics package. However, there aren't many programs which offer this sort of feature – it's much more common to assign a default icon to all image files of a particular format.

PictIcon first appeared around three years ago and was written by the same chap who created the excellent icon editor *Iconian*. It's not the most sophisticated of programs but it does work very effectively. When run, it creates a Workbench AppIcon onto

Spot It

One of my regular drinking haunts has recently installed a marvellous little machine which gives sad dullards such as myself, who've been sat in front of a monitor all day long, the chance to gaze at a screen when supping a pint of an evening too.

Amongst the many mentally taxing games the machine offers are various multiple choice quizzes, a couple of two player strategy games and a spot the difference game. This offers players a series of pairs of pictures and requires them to point out the differences by touching the relevant parts of the photographs.

In an attempt to distract the players and/or provide further amusement, the creators of the game saw fit to include a series of erotic pictures. I can tell you, that machine's brightened up quite a few dull nights in that particular establishment.

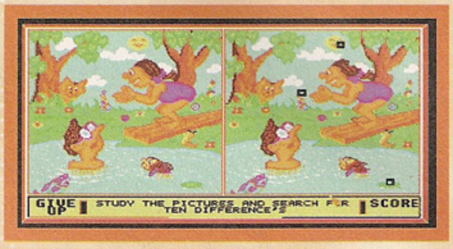
Anyway, this disk contains the same sort of game, only without the interesting pictures and the touch-screen control system. Although it's a couple of years old now, it's still a decent enough little effort.

My heart sank a little when I read the words "You will see two small, identical pictures", as I didn't fancy my chances of spotting any differences whatsoever between two pictures which were in fact identical. Fortuitously though, this was nothing more than an inaccurate piece of instruction-giving on the part of the programmer, and there were indeed subtle changes between the images displayed on the left hand side of the screen and those on the right hand side.

I did find it slightly annoying that you have to click on the difference on the right hand image, rather than on either image, as would seem more logical. Still, once you realise this the game is very easy to play.

It might not boast quite the same pulling power as the machine in my local boozer, but this is still a competently put together game.





They both look pretty similar to me.







Be careful – you may well burst blood vessels in your eyes when you're straining to spot the differences.

BY: Deano
WARE: Free
PD LIBRARY: Classic Amiga Software
NO OF DISKS: 1
PRICE: £1 + 75p P&P

Santa Monica FC

Selection of the Month

As a keen football fan I've always loved football management games, and I'm not alone either, as the phenomenal success of titles such as *Championship Manager* over the years proves.

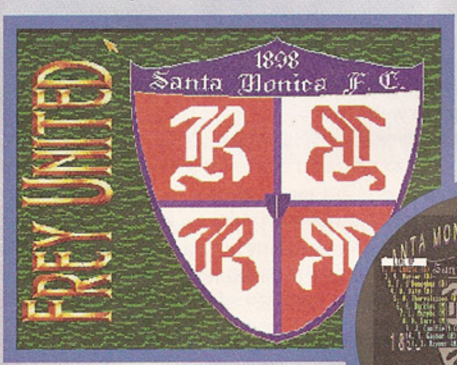
What football fan hasn't felt at some time or other that they could have made a better decision than the manager of their team? Not this one, that's for sure. I'm a Manchester United fan too, so it's not as if I've got much to moan about, especially compared to the supporters of many other teams.

Santa Monica FC is a good old-fashioned football management game of the sort which used to proliferate on the 8-bit machines in the mid-'80s, before football became sexy and fashionable. You take control of a side languishing in the bottom division of a league and you must mould a motley bunch of randomly named ne'er-do-wells into a footballing force.

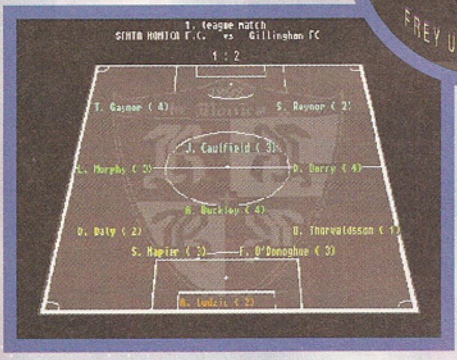
As you ascend the divisions domestically, you need to strengthen your squad and offload the hangers-on. You can compete in domestic and European competitions, improve your ground and bung greedy agents huge amounts of money to lure Scandinavian players to your club. Possibly.

Yes, with *Santa Monica FC* you too can buy overrated prima donnas, play talented forwards as ineffectual defensive wing-backs, drop your star players for critical top-of-the-table clashes and generally do all the sorts of things which real football managers do, much to the chagrin of the loyal followers of their teams.

Santa Monica FC may not have the depth or detail of commercial football management programs but it's immensely involving nevertheless. I wasted long hours of my youth playing games like this a decade or more ago, and after playing *Santa Monica FC* I've remembered why that was.









Take control of your shoddy team and build them up into world beaters, in true 8-bit management style.



BY: Adam Barcezyiski
WARE: Free
PD LIBRARY: Classic Amiga Software
NO OF DISKS: 1
PRICE: £1 + 75p P&P

which a picture file can be dropped. *PictIcon* then creates a thumbnail representation of the image which is then used as the icon for the image file.

PictIcon isn't perfect. It depends on DataTypes so it takes a while to deal with Jpeg images, and the lack of even a simple graphical interface means that to get the most out of it you'll need to alter the program ToolTypes on a regular basis, or else use *PictIcon* via a command line.

However, it does what it does with the minimum of fuss, produces good results when properly configured and supports the *NewIcons* system. In a program of this kind, you can't hope for much more than that.

AIO – End of an Era

BY: Chris Seward
WARE: Free
PD LIBRARY: Amiga Heaven PD
NUMBER OF DISKS: 1
PRICE: SAE and disk

Back in the December issue of *Amiga Format* I reviewed the two-disk *AIO Compilation #1* package which contained several back issues of the Amiga Information Online magazine. Since the magazine is distributed primarily via the Internet (the AIO website can be found at http://www.amiga1.demon.co.uk/aio/), the disks provided a way for those without a net connection to take a look at this interesting magazine.

AIO – End of an Era collects together three issues of the online magazine.



AIO – End of an Era is a collection of issues 16-18, and the title refers to the fact that from issue 19 onwards (the December 1998 issue), the magazine will no longer be distributed in AmigaGuide format as it'll have a flashy custom-written interface instead.

As with earlier issues, these are quite nicely put together with a selection of interesting and often informative articles. In issue 18, for instance, there's a piece discussing the benefits of banging huge amounts of RAM into your Amiga, a selection of interesting websites (admittedly not much use to offline readers), and, says he somewhat bigheadedly, an excellently written review of *AIO Compilation #1*, reproduced from the pages of a rather fine publication called *Amiga Format*.

Each issue also features an interview with an Amiga programmer,

Continued overleaf ➡

so if you're interested in the opinions of the folk behind software such as *ADoom* and *IDEFix* then you'd do well to take a look.

B-Card + Interlaced 1.0

BY: Bernard Cain
WARE: Free
PD LIBRARY: Online PD
NUMBER OF DISKS: 1
PRICE: 75p + 75p P&P

B-Card has appeared in the pages of PD Select before, but the author reckons this updated version improves significantly on earlier releases, and to be honest I'd have to agree with him.

B-Card is a business card creation program which, while not being the most sophisticated program ever written, is certainly more than capable of producing some quite impressive results. This latest version refines the program subtly in a number of ways and removes a couple of annoying limitations which were previously present. For example, you can now edit your cards properly when using the magnification tool.

The biggest change is that the program now runs in an interlaced screen mode. This means that the display can be a little flickery and unpleasant to work with for long periods, but it also means that more precise positioning of text and graphics is possible. Consequently, it's now easier to retain tight control of how your cards will look when they're printed out.

ONLINE UPDATE

A minor upgrade has been released for users of *STFax Pro*. The v3.6 upgrade, available to registered users of the *Amiga Format* Gold-winning package, fixes a number of small bugs and enables the software to better handle corrupted fax files. It's available from the Haage & Partner website (at http://www.haage-partner.com) or through Active Technologies (http://www.active-net.co.uk).

On Aminet there's a new version of Oliver Roberts' famous *F1GP-Editor*, which has been breathing new life into Geoff Crammond's wonderful racing game for more years now than I care to remember. *Formula One Grand Prix* is undoubtedly one of the finest home computer games ever created, but it's now something like six or seven years old. If you're still competing against Piquet and Mansell rather than Villeneuve and Hakkinen, you should get hold of a copy of *F1GP-Ed* as soon as possible.

One of the biggest talking points online has been the appearance of a brand new IRC client which could finally provide some real competition for Vapor's *AmIRC*. Called *BlackIRC*, it too makes use of *MUI* and provides features such as a single-window chat mode, letting you talk in several channels at once, without having to flick between lots of windows.

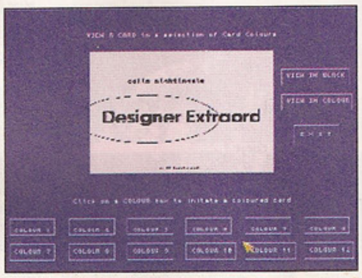
***BlackIRC* includes a video-conferencing plug-in to complement the pure text of traditional IRC. There's also a Windows95 video-conferencing client so you can talk to PC folk.**

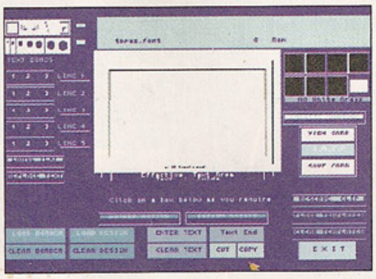
An audio conferencing plugin for *BlackIRC* is promised later this year, which should make it possible for anyone with an *AHI*-compatible sound board to chat online, and the audio quality should be better than that of a traditional telephone line.

***BlackIRC* isn't finished yet, but a beta version 0.9 is currently available on Aminet. The completed program will be Shareware, but with the registration fee being a paltry US$13, I should imagine that there'll be plenty of Amiga netizens willing to splash out on it. For more details, check out the website at http://innovative.in-tec.de/index_e.html**

As with previous releases of *B-Card*, this isn't going to appeal very much to folk who already own a decent desktop publishing package or a powerful word processor because those types of program are capable of producing similar results. However, as an eminently affordable means of producing business cards, it's hard to fault *B-Card*.

You can change the background colour to shocking pink, provided you've got a colour printer.







A convincing homemade business card. Now I've just got to get the bank to lend me some cash...

Diamond Fever



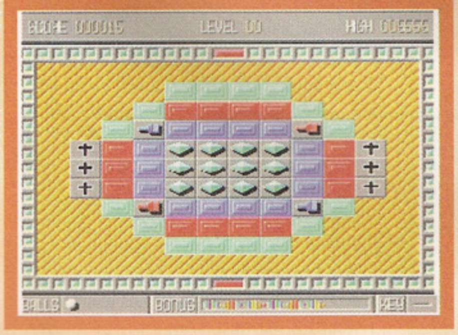
This is just what the world needs – another *Arkanoid* clone. But wait! This one has an added twist! It, erm, lets you control the ball. A bit. Ahem.

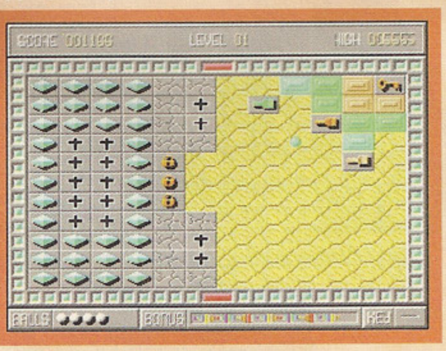
In *Diamond Fever*, instead of using a bat to control the ball as you bounce it off various coloured blocks, you can use a joystick to direct it. The object of the game is still to remove all the coloured blocks from the screen, although that alone won't allow you to progress to the next level. The blocks protect diamonds and it's only when these have been removed that you can move on.

You must avoid colliding with tombstone bricks as these mean instant death. Furthermore, you can only remove one colour of brick at a time, but if you hit a brick marked with a brush icon, the colour which you can remove changes to match that brush.

Unfortunately, not all the colours of brick on a particular screen will be accompanied by an appropriately coloured brush. When this happens you'll start with the ability to remove bricks of the colour in question, but should you accidentally catch a brush brick, you'll need to restart the level in order to complete it.

If all this sounds a tad confusing, rest assured that it's very easy to pick up. However, I did find *Diamond Fever* to be rather frustrating at times because catching a brush brick before you're ready to change colours is all too easily done. Still, if you like your puzzle games to be on the tricky side you'll enjoy this enormously, and with 100 levels it should certainly provide a long term challenge.





Work out a route before you start as you can easily miss a coloured block and find yourself stuck later.

BY: Various
WARE: Free
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: 1
PRICE: £1 + 75p P&P

Online Games Pack #32

This is a collection of ten games. The first, ***Noughts and Crosses Deluxe***, is a simple one-player version of the ancient pencil-and-paper game. Wodsoft have done about as good a job as they could in computerising this age-old game, but don't expect more than a few minutes of entertainment from it.

Black Hole is an odd little effort which runs on the Workbench. The object is to lure two alien spacecraft into a black hole with your nippy joystick-controlled vessel – not really my cup of tea, I'm afraid.

Party Game is billed as "The ultimate party game" by its creators, Dynamite Duo. All I can say is that if I was at a party where this was the best entertainment on offer, I wouldn't even sit around sifting through the host's record collection or lurk in the kitchen drinking someone else's beer. I'd be off quick as a flash.

In terms of skill demanded, ***Party Game*** ranks somewhere just below turning on a lightswitch – it really is completely undemanding, unstimulating and pointless.

Wriggle is an entertaining version of the old worm game in which the objective is to scoff food while avoiding running into obstacles. Here it's impossible to die by running into your own tail, but that's just as well because the game is controlled by the mouse and it's hard enough to get the hang of anyway.

Mini Arcanoid is a polished ***Breakout*** clone which runs on the Workbench screen. Yes, there have been a million and one virtually identical games over the years, but this is one of the better ones.

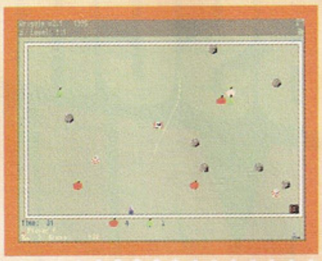
Euchre is a computerised version of a card game I confess I've never come across before. It's played with a 24-card deck by four players working in two teams. Then there's ***ProGammon***, a competent version of backgammon.

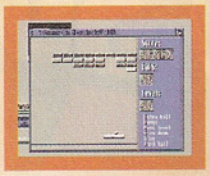
LightSpeed is a ***Tron*** light cycles game. As with all games of this kind, it's quite good fun when played with three other individuals. However, if you play it in the one player mode you'll soon be cursing the computer-controlled opponents who seem to have the ability to run their cycles right up to a wall before turning, thereby boxing you in.

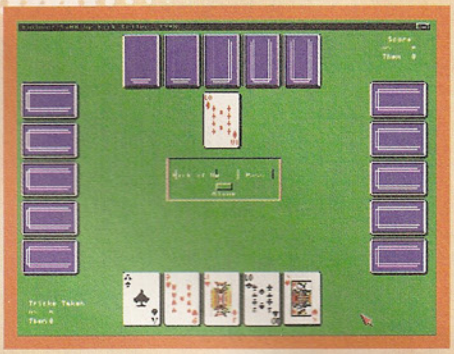
Log, slightly disappointingly, is not a comical simulation of one man's struggle to shed his load the morning after a particularly fibrous meal. Instead, it's an ***AMOS***-authored puzzle game in which the aim is to turn out all the lights on a grid. However, when you turn off one light, other lights around it are affected and may turn on or off accordingly. It's more interesting than it sounds, I can assure you...

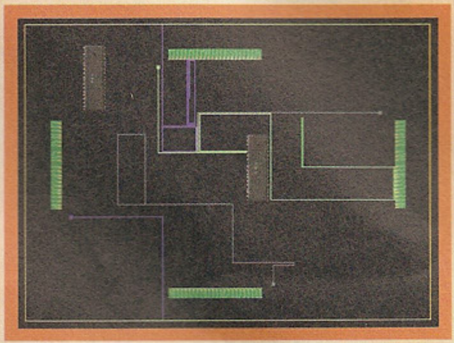
Finally, the disk is rounded off with a Workbench-friendly version of ***Hangman***.

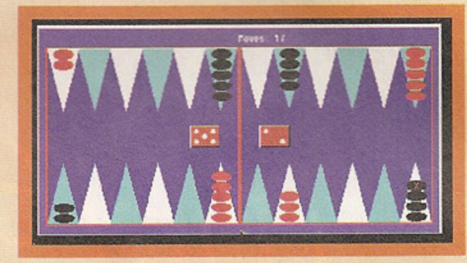
OnLine Games Pack #32 might not contain any programs which will set the world on fire, but there are some nice little versions of some classic games, and ten games for less than two quid can't be bad.











A collection of familiar games that can always find a home within the pages of PD Select.

BY: Various
WARE: Free
PD LIBRARY: Online PD
NUMBER OF DISKS: 1
PRICE: 75p + 75p P&P

V-Clock 1.2

BY: Allan Versaevel
WARE: Free
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: 1
PRICE: £1 + 75p P&P

Have you ever lost track of the time when sitting in front of your Amiga? Have you ever fired up your net connection for a quick surf, only to glance at your Workbench clock some time later and find out you've been sat there for a good few hours? It's nothing to be ashamed of, we've all done it.

Even though most folk have the time displayed somewhere on their Workbench screen, it's usually deliberately tucked away in a corner and doesn't get noticed unless an effort is made to check on it. What's more, although some software makes it a possibility, I don't suppose there are many of us who have the time displayed on any custom screens we have open.

Speaking clocks offer a nice alternative to glancing at your wristwatch every few moments – when installed in your Workbench Startup drawer, they'll announce the time at intervals that have been specified by you. Allan Versaevel's effort is nicely put together, with an easy to use graphical user interface and some nice, crisp sampled speech.

You can switch between 12 and 24 hour modes and choose whether to have the clock chime every hour or half-hour. You can also hit a hotkey whenever you choose (by default this is Shift+Alt+F10, although you can change this) and have *V-Clock* announce the exact time.

V-Clock relies on *Play16*, the superb sample playback utility, and you'll need to have at least version 1.8 of this installed. You can replace the default sound samples with your own voice if you feel the inclination.

There are other speaking clock programs around which offer practically identical functionality, but I have to confess that I rather like *V-Clock*. Perhaps it's something about the default voice which announces the time calmly and reassuringly.

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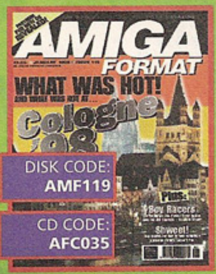
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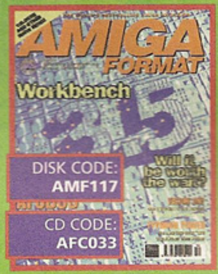
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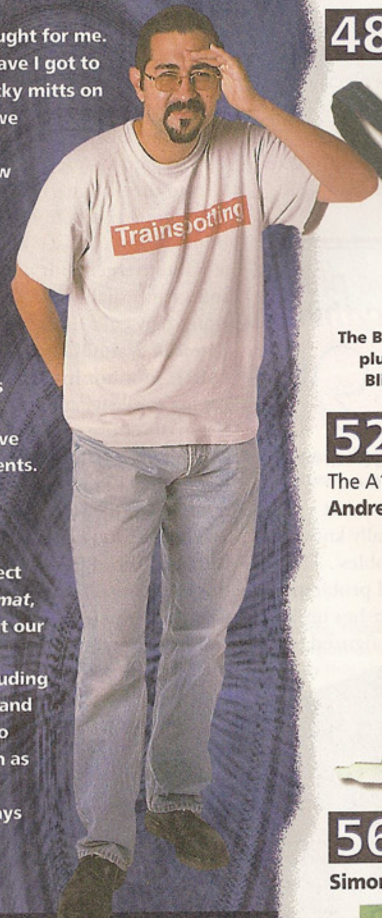
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Spare a thought for me. Not only have I got to get my sticky mitts on all the goodies we review in this section from now on, we'll only have Nick's expertise available on a freelance basis and he won't be able to write as many reviews as he used to because he'll have other commitments.

Still, I don't anticipate any shortfall in the quality you expect from *Amiga Format*, and I'm sure that our vigilant team of freelancers, including Simon, Andrew and Tony, will help to keep this section as informative and useful as it always has been.

Ben Vost

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BlizzardVision PPC

AMIGA GOLD FORMAT

Andrew Korn tries out ***phase 5***'s first A1200 graphics card and finds out whether AGA has finally had its chips.

There's something distinctive about reviewing new phase 5 products. You open that little black cardboard case and reveal a gem; a circuit board of almost baroque elaboration filled with artfully laid tracks, baffling multi-layered design and enigmatically dark chips promising technological delights.

phase 5 circuit boards seem more cutting edge; you can't help feeling that anything this cyberpunk just has to be a really good upgrade. Then you get to the software installation.

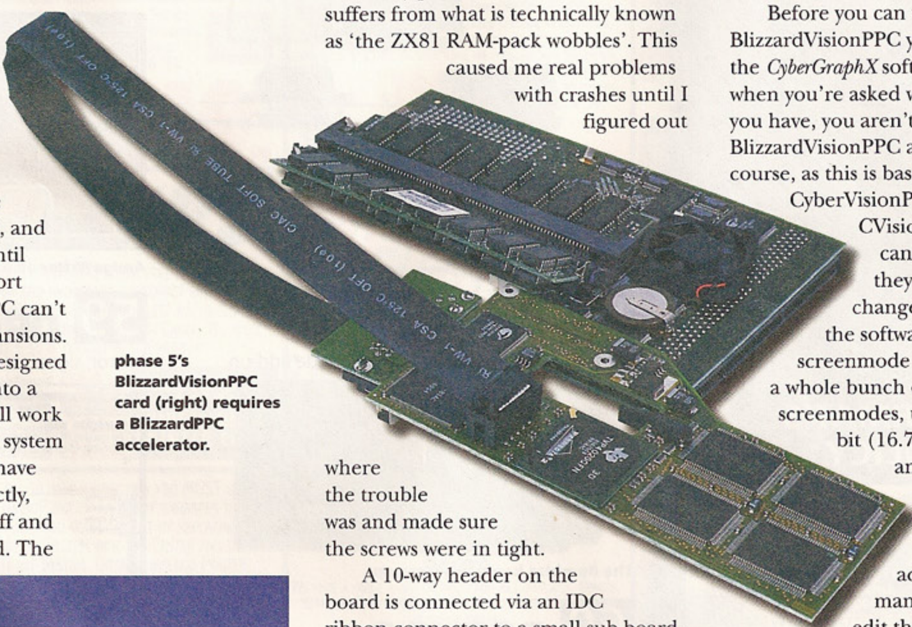
ODD-SHAPED BOARD

The BlizzardVisionPPC is an oddly-shaped board which plugs into a small slot on their BlizzardPPC accelerator cards – if you don't have one, you can't use it. It sticks out across the motherboard, over both the floppy power and LED cable headers, which can be accessed through a large hole in the middle of the board, and the clockport, which cannot. Until anyone comes up with a clockport extension, the BlizzardVisionPPC can't be used with any clockport expansions.

The BlizzardVisionPPC is designed for A1200 tower use. It will fit into a desktop case, but how long it will work before overheating and causing system crashes is anyone's guess. I did have such a set-up functioning perfectly, albeit with the trapdoor cover off and the top half of the case removed. The daring might succeed with a more socially acceptable (and less electrically dangerous!) lid-on alternative involving some clever DIY with cooling fans. 68060 chips are rather cooler and make life a lot easier, but not as much as tower cases do.

> "It can be a problematic piece of gear, but so is everything else that really pushes an A1200 motherboard."

Two small screws are supplied to help clamp the boards together, a necessary procedure as the socket suffers from what is technically known as 'the ZX81 RAM-pack wobbles'. This caused me real problems with crashes until I figured out where the trouble was and made sure the screws were in tight.



phase 5's BlizzardVisionPPC card (right) requires a BlizzardPPC accelerator.

A 10-way header on the board is connected via an IDC ribbon connector to a small sub-board, which carries a standard 15-way D-type monitor connector and a 4-pin socket for 3D shutter glasses. I was a little worried about having a video signal travelling down a long ribbon cable, but in practice there appear to be no noticeable adverse effects; the output is crystal clear and free of noise.

DOUBLE TROUBLE

The first and most significant problem with the BlizzardVisionPPC becomes apparent at this point. You now have two video output sockets, the one on the BlizzardVisionPPC and the standard one on the Amiga. Graphic card output relies on retargeting screens from the Amiga's internal hardware to the extra graphics card. In this case this is done with software called *CyberGraphX*. Programs opened in a *CyberGraphX* screenmode will appear on the output from your BlizzardVisionPPC, but any that use an AGA screenmode will still be sent to the Amiga's own video output.

You can use a mode promotion utility to force most software to open on a default screen, but there's some software (notably older games) which won't play ball. If you fancy a game of *Speedball 2*, you'll have to plug a telly or 15KHz monitor into the back of your Amiga to see what's going on. Of course, if you don't use much old software which requires AGA you could always not bother – you won't be picking AGA modes out of choice.

Before you can use your BlizzardVisionPPC you have to install the *CyberGraphX* software. Confusingly, when you're asked which graphics card you have, you aren't offered BlizzardVisionPPC as a choice. Of course, as this is basically the same as the CyberVisionPPC card you use the CVisionPPC driver, but I can't help thinking that they could have at least changed the name. Once the software is installed, screenmode requestors will have a whole bunch of new *CyberGraphX* screenmodes, up to 800x600 in 24-bit (16.7 million colours) and 1600x1200 in 8-bit (for those lucky few with a monitor that can actually draw that many dots!). You can edit these using a program called *CGXmode*, but it's a fairly technical task and there are no instructions included.

This is well worth doing because unless you tweak your screenmodes you won't get such good displays as the defaults are much too low. I pushed the 640x480 8-bit mode up from a decent 72Hz to a beautiful, rock solid 97Hz, I turned 1024x768 in 16-bit to 1024x768 in 24-bit and so on. The software really seems to have been rushed to get the hardware out quickly.

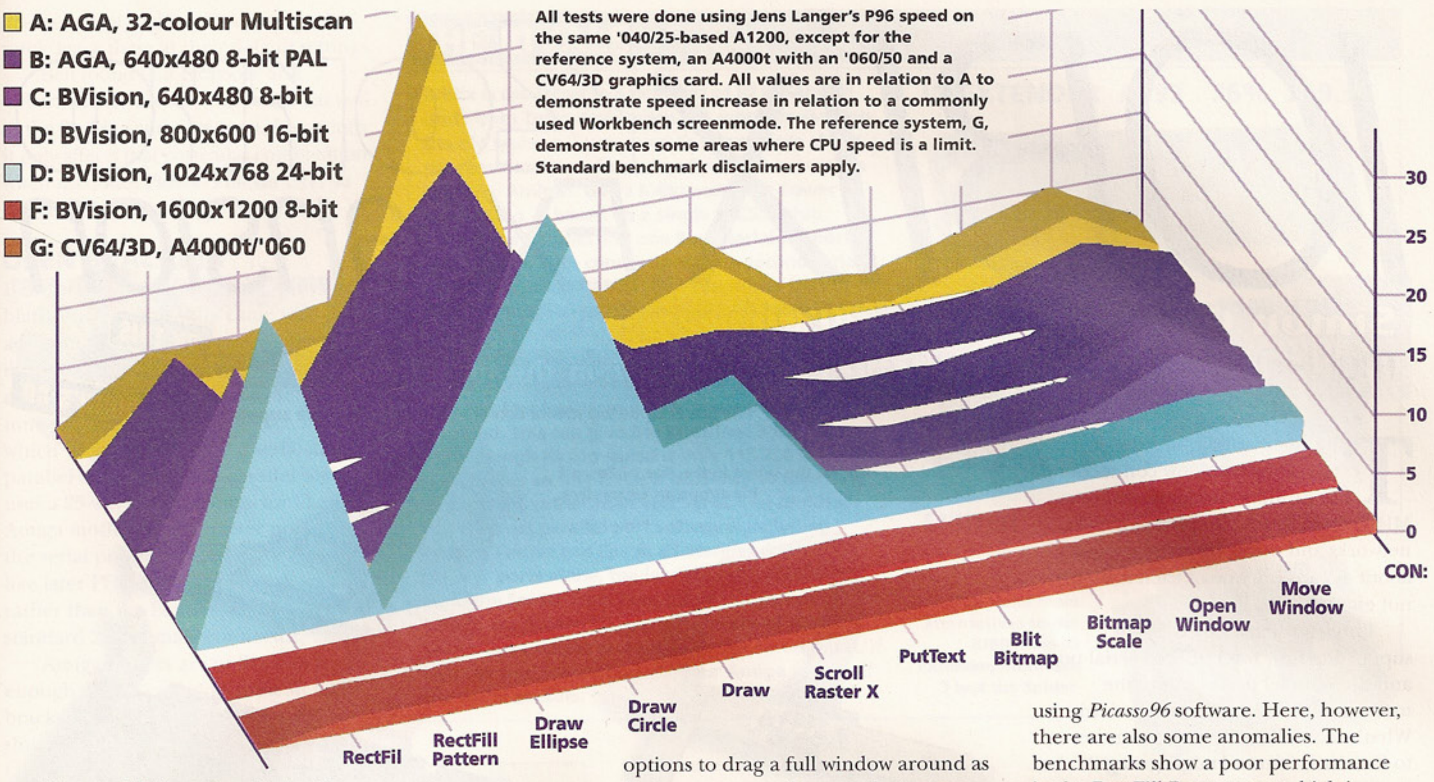
Once you finally get it working and optimised, you can sit back and enjoy. BlizzardVisionPPC may have you cursing for a day and a half but it'll have you humming a happy tune thereafter. If you haven't seen an Amiga with a

3D OR NOT 3D

The Permedia 2 brings something new to the Amiga – accelerated 3D graphics. It has an integral maths processor capable of generating polygons much faster than even a fast PPC and can internally smooth, Gouraud shade and generally beat them into rather gorgeous-looking shape. As it stands, a BlizzardVisionPPC will only add a couple of fps to Quake as CPU rendering the polygons is a bottleneck, but a hardware accelerated version would go a lot faster on the Permedia 2 and would look much, much nicer too.

The BlizzardVisionPPC is theoretically capable of 1 million polygons per second, making it more than twice as fast as a Nintendo 64. It also comes with some tasty features, such as per pixel perspective correction, fog and depth cueing, alpha blending and anti-aliasing.

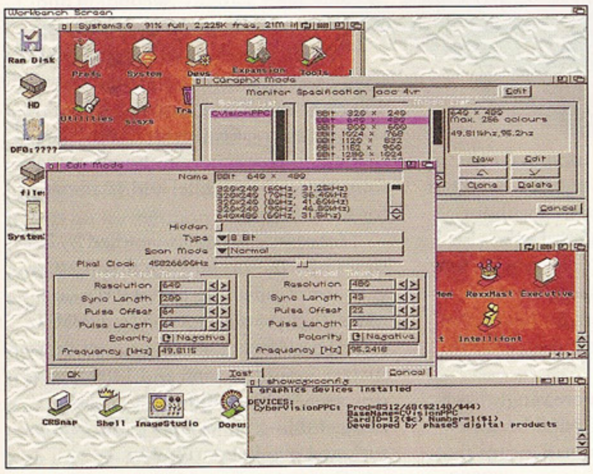
The Permedia 2 has had some bad press among PC gamers, mainly due to poor software support. How well it does on the Amiga rather depends on the CyberGL and Warp3D systems, and the programs that will use them. Be sure that we'll cover this all in much more detail when there's something more to talk about.



All tests were done using Jens Langer's P96 speed on the same '040/25-based A1200, except for the reference system, an A4000t with an '060/50 and a CV64/3D graphics card. All values are in relation to A to demonstrate speed increase in relation to a commonly used Workbench screenmode. The reference system, G, demonstrates some areas where CPU speed is a limit. Standard benchmark disclaimers apply.

graphics card before then it's hard to explain just how much of an improvement it is, but look at the screenshots on this page to get some idea. Of course, what screenshots don't tell you is how much faster it all is.

You can use MCP's solid window options to drag a full window around as fast as you normally move that orange square. Displays flicker less, windows open faster, you can have backdrops without eating up your chip RAM and slowing to a crawl and you can fit a lot more onto the screen. Workbench becomes more productive, word processors can use larger fonts for smoother text while displaying the same amount of words, and colourful high-resolution images can be worked on in your paint program without the brush trailing slowly behind your pointer. In short, everything runs faster and everything looks nicer.



Tweaking those screenmodes. Get used to this sight...



Workbench in glorious 1024x768 and 24-bit. You'll never want to do graphics work on AGA again.

WHICH BUS?

BlizzardVisionPPC is a massive improvement over AGA, but is it the best option? There are other ways to go, such as a Zorro 2 or 3 busboard with a Zorro card, or the Ateo Concepts high-speed ISA busboard. Zorro 2 busboards are actually rather slow and lag behind the AteoBus considerably, but neither matches the BlizzardVision local bus, which appears to be about on par with the true Zorro 3 slots in an Amiga 4000.

In terms of hardware, nothing comes close. The BlizzardVisionPPC has a generous 8Mb of SGRAM memory, twice as much as the PicassoIV and a lot faster. The display chip is the Permedia 2, a much more advanced chip than those used in any other Amiga card. It has a 230MHz RAMDAC which means it can throw pixels at the screen very quickly indeed, and, of course, has 3D functions (see boxout).

Software is a bit more of an issue. There are some things *CyberGraphX* software does very well and others it doesn't do so well. For example, Intuition functions are better on boards using *Picasso96* software. Here, however, there are also some anomalies. The benchmarks show a poor performance in the RectFill Pattern test, which is because the driver simply doesn't take the hardware into account. The Permedia 2 should kill the opposition with things like this if its internal feature set was being properly used.

So there we have it – great hardware let down by unfinished software. It can be a problematic piece of gear, but so is everything else that really pushes an A1200 motherboard.

As this board is crippled by the software (or lack thereof), I ought to give it a low score. On the other hand, Warp3D drivers are due any day, phase 5 do get their software right in the end and even though it's only showing half its power, it still kicks the opposition into the dust. Frankly, it would be churlish not to give it an *AF* Gold. Buy one – your eyes will love you for it.

MANUFACTURER: phase 5 Digital Products http://www.phase5.de
SUPPLIER: Eyetech (01642) 713185
PRICE: £159.95

Pros and Cons

- + Good price.
- + Great hardware.
- − Unfinished drivers.
- − Monitor problems.

OVERALL VERDICT: Great hardware which will get better and better as the software improves.

91%

IOBlix Zorro Expansion

Simon Goodwin tests ***IOBlix***, the latest multi-IO expander for Zorro Amigas.

AFCD37:-In_the_mag-/IOBlix

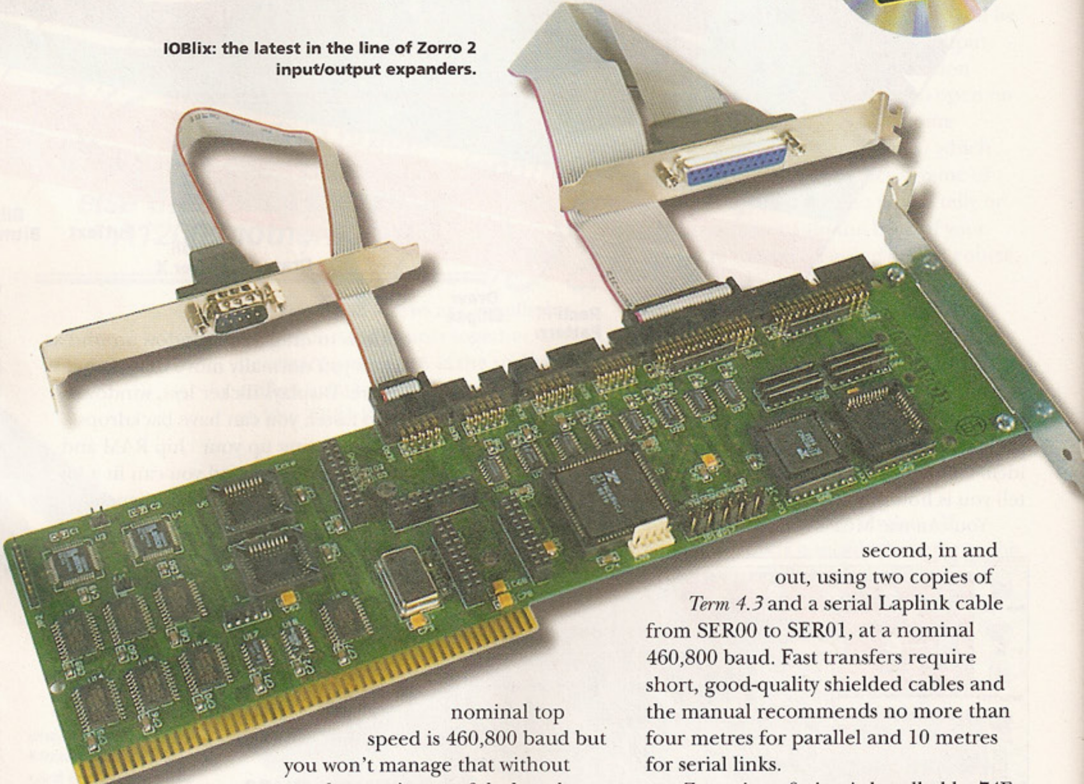
ON THIS MONTH'S CD

***AFCD37*: Updated IOBlix drivers with EPP Zip drive support.**

The Amiga's ubiquitous serial and parallel ports allow connections to printers, modems, scanners, MIDI music boxes, samplers, joysticks, networks and more. If you're serious about expansion, one of each is simply not enough.

Enter IOBlix, a Zorro 2 card supporting four fast buffered serial ports and two parallel ports built to the modern EPP bi-directional standard. What's more, the software recognises up to five cards in one Amiga, giving 20 serial and ten parallel channels, assuming you can find somewhere for all those cables and connectors.

IOBlix doesn't stop there – three empty square sockets for FIFO buffers, four 20-way connector blocks and a baker's dozen of uncommitted pins accommodate expansion daughterboards, with Ethernet modules, simple IDE ports and *AHI* sound in the works, plus a two-way Infra Red controller. So far these are vapour, but an early prototype of the sound add-on was on show at Cologne Messe and the prototype Ethernet unit was tested over the Christmas period.



IOBlix: the latest in the line of Zorro 2 input/output expanders.

> ***The IOBlix board is well made, using modern surface-mounted components, apart from the plug-in interfaces.***

HARDWARE

The IOBlix board is well made, using modern surface-mounted components, apart from the plug-in interfaces. The biggest widget on the board is the ST16C654, the latest in an LSI line of common to fast serial expansions from IOExtender to Port Plus.

This is a multiple serial and parallel controller with FIFO (first in, first out) buffers to collect data en route to and from the computer.

These chips were designed to prop up original IBM PC ports, which struggle to deliver a quarter of the performance of the Amiga's original RS232C interface. 64-byte serial and 16-byte parallel buffers reduce over-runs and system interrupt overhead. The nominal top speed is 460,800 baud but you won't manage that without errors unless you're careful what else you do. Simultaneous transmission and reception at 10K per second is a reasonable expectation, far better than the motherboard port can manage in similar conditions.

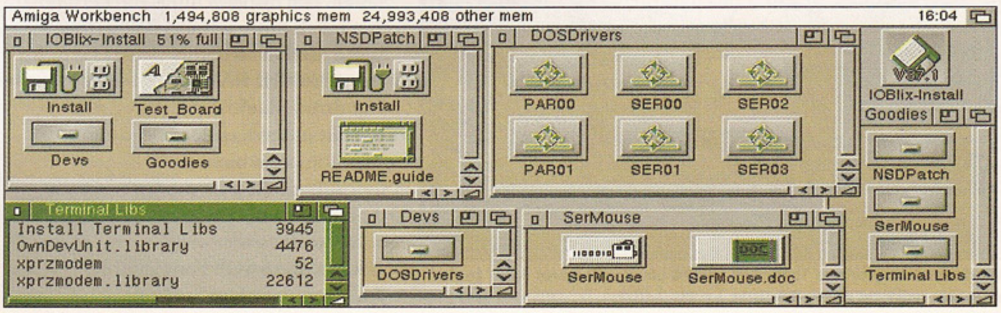
Missed bytes are increasingly likely at speeds over 115,200 baud because Zorro 2 interrupt overhead means that heavy system activity, even on a 68060, can upset synchronisation. Hardware intensive operations, such as swapping or grabbing screens, may cause glitches at top speed, especially on reception.

My A4000's ZMODEM data transfers peaked at 15,000 bytes per second, in and out, using two copies of *Term 4.3* and a serial Laplink cable from SER00 to SER01, at a nominal 460,800 baud. Fast transfers require short, good-quality shielded cables and the manual recommends no more than four metres for parallel and 10 metres for serial links.

Zorro interfacing is handled by 74F-series byte buffers and two little Lattice gate arrays, offspring of the PALs on older Zorro cards, clocked by a 20MHz crystal oscillator. There's a row of tiny surface-mounted 1488 and 1489 line drivers, which are difficult to replace if dodgy cabling blows a port, and one socketed parallel port buffer.

Our unit came with four serial ports, SER00 to SER03, and one parallel port. An additional cable and ST78C36 chip plugs in to enable PAR01. A bank of ten jumpers in eccentric order can enable printer autofeeding, power outputs and DTR on pin 20 if you're using proper

All this bundled software and parallel IP drivers too.



25- way serial sockets. Most users can safely leave these at their default settings.

Ben found that PicassoIV and CyberStorm 2 clashed with IOBlix, as well as the Buddha and Catweasel. Apparently it only affects that particular combination when used with Picasso's flicker fixer so slot shuffling should cure it.

OPEN BRACKETS

Besides the main Zorro card, with a blank end-plate, IOBlix came with *five* additional connectors, mounted on individual brackets, and a seventh empty end-plate with cutouts for one nine-pin and one 25-pin socket, into which you could transfer a serial and parallel connector. The parallel socket uses a 25-way D-type connector like the Amiga motherboard printer port, but the serial ports use 9-pin male D types, like later PCs, or Amiga joystick sockets, rather than the familiar RS232C standard 25-pin male connector.

Amiga owners are unlikely to have enough empty card slots to fit all these brackets, and may begrudge the loss of slots or external access for other cards. Other IO boards fit one nine and one 25-way connector onto the card edge, where IOBlix has just a blank end-plate, so you must sacrifice extra slots for each external connection. These could cap off cards with no external access (say Tandem, Buddha or a Zorro Catweasel) but it'll be hard to use all the potential of IOBlix without extensive reboxing.

In the manual, RBM Computertechnik comment:

"You will probably ask why there are no outlets for connectors on the IOBlix bracket itself: The answer is very easy: connectors mounted here would interfere with the components on the IOBlix an furthermore this place is reserved fro the outlets of the module ports on the IOBlix (sound, ethernet)." (sic.)

All these brackets plug into a row of six sockets along the top edge of the IOBlix Zorro card. The pin-out is commonly used on PC clones so you could get more economical end-plates, with one 25- and one 9-way, or a pair of 9-pin holes, for a quid or two from your local Wintel box shifter. However, the bracket stack shipped with IOBlix smacks of a job lot.

SOFTWARE

IOBlix comes with software drivers on one floppy disk and ten A4 pages of documentation, translated from German and clearly illustrated. Both software and documentation are creditable, with standard Workbench installers and a confidence-building 'testIOBlix' icon and command that checks out the hardware and reports on what it finds. Commodore settings are taken as the default, augmented by protocol parameters like COPY SER01:31250/8N1X. There's no preference GUI. Updates are on the website at http://www.rbm.de

You get standard serial and parallel devices, compatible with programs that open ports through the system, plus "ioblixepp.device" for PC-type extended parallel port peripherals which require higher level software support, like Zip or scanner drivers.

The package includes undocumented terminal libraries with custom support for Zmodem transfers and the excellent Freeware *SERmouse* system driver for PC-type serial pens, pads and mice. *NSDpatch* redirects programs calling for standard serial and parallel devices to IOBlix units. MIDI music programs and *Parnet* drivers that hit the metal aren't supported.

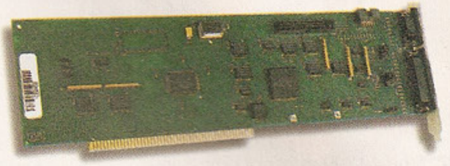
THE RIVALS

IOBlix is the latest in a rich vein of IO Expansion units from Zorro developers. It's worth re-reading the old reviews if you want to know more about the ramifications of serial and parallel expansion on Zorro Amigas. GVP's IOExtender, via Power Computing, is based on a single 16C552 chip, giving one parallel and one 9-pin serial connector as standard, with connections for a second serial port if required. Performance resembles that of IOBlix, though expansion potential is more limited.

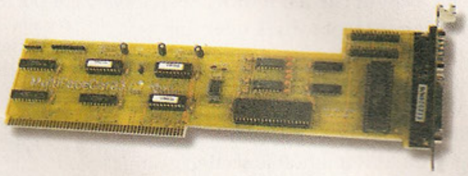
BSC's Multiface 3 is based on older Motorola chips, which have less buffering but have automatic hardware serial handshaking so data shouldn't be lost even while interrupts are disabled. This can give the Multiface 3 the edge, even though its top speed is only 115,200 baud, and its buffer is so tiny it has a tendency to take over the system, rather than vice versa. The Multiface has the best parallel port software, including custom *Parnet* and Epson GT scanner drivers.

For ports alone, the leading contender was once the Spider from Zeus Electronic Development GmbH, via Golden Image, but a brace of IOBlixes works out cheaper and offers better throughput, if you can find somewhere on your Amiga to put all the serial sockets.

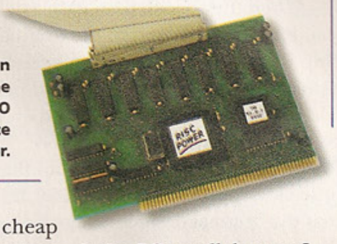
IO EXTENDER AF93 76% £69.95



MULTIFACE 3 AF93 71% £79.95



SPIDER AF96 65% £299.95



The three main alternatives to the IOBlix: the IO Extender, Multiface 3 and the Spider.

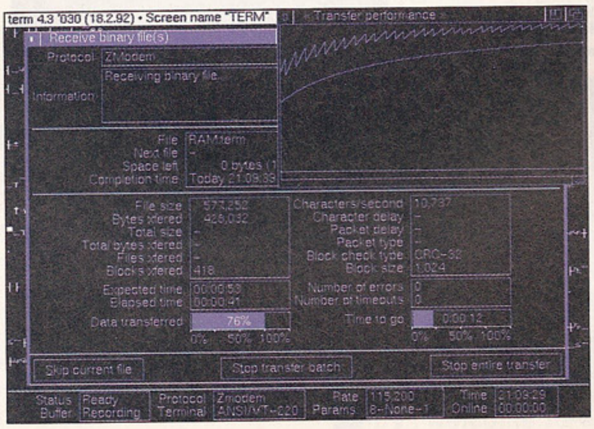
RBM are the newest stars of the German hardware scene.

CONCLUSION

IOBlix makes good use of a Zorro slot and if you need more ports, or faster ones, it's the best option around. The software is good, with early bugs fixed, and it's now only limited by old Amiga programs that bash the metal or are unaware of PC-type EPP peripherals. The latest version supports Zip drives and cheap scanners made for PC parallel ports. It could be even better once the sound, Ethernet, IR and IDE add-ons arrive.

The brackets demand more thought. RBM's manual concedes that "the huge number of IOBlix ports can make this difficult. We recommend to install only the required ports."

You'll have to weigh this advice against your own mechanical set up, expansion requirements and plans. If you're never going to need all those ports, a Multiface or IOExtender might be a more convenient solution, if you can find one.



***Term* manages input and output at over 10K per second.**

MANUFACTURERS: RBM Computertechnik.
SUPPLIER: White Knight Technology (01920) 822321.
Web: http://welcome.to/whiteknight/.
PRICE: IOBlix with one parallel and four serial ports, £99.95.
Additional parallel port and buffer chip, £TBA.

Pros and Cons

- \+ All the peripheral ports you'll ever need.
- \+ Fast, buffered two-way interface channels.
- \+ Parallel port scanner and Zip drive support.
- − No room for all those 9-pin connectors.

OVERALL VERDICT:
The basis of a powerful and general Zorro 2 sub-system.

82%

IOBlix A1200s & A1200p

IOBlix comes to the A1200, or is it Hypercom in disguise? Andrew Korn investigates.

The A1200 may not come with Zorro as standard, but a strange twist of fate left it with a secret expansion port, of sorts. Under the keyboard, there is a small removable section of the metal shield over the RAM chips. Commodore were originally going to ship the A1200 with 1Mb of chip RAM, this removable section giving space for the other 1Mb to be added.

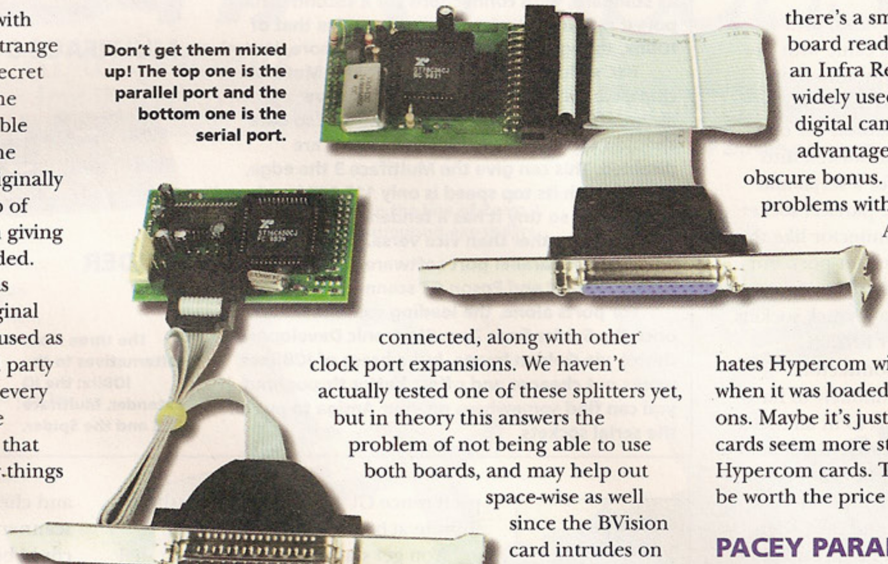
When they decided on 2Mb as standard, they left part of the original chip RAM header in place, to be used as a port for a real-time clock. Third party add-on manufacturers have tried every conceivable way of jamming more functionality into the A1200, and that little clock port has been used for things that the original designers never dreamed of.

It's those few spare data lines that allow RBM to produce an A1200 version of their IOBlix I/O card, albeit a cut-down one. The IOBlix A1200 comes in two shades: the A1200s for serial and the A1200p for parallel. The serial version uses a 16650 fast UART chip, theoretically capable of 1.5Mbps, so finding anything to keep up with it would be quite a task.

The Parallel board has a pretty tasty 7836 EPP/ECP driver chip which should be capable of 2Mb/s. Both boards are small enough to fit easily onto the clock port, a job of about 10 minutes (half that if you have a tower). Software installation is well automated and easy and *NSDPatch* is supplied for legal device redirection to allow transparent replacement of the internal ports.

TWO INTO ONE

The most obvious problem is that you can only fit one clock port board at a time. Alternatively, the Hypercom 3/PortPlus supplies both serial and parallel more cheaply than buying both IOBlix boards. However, RBM are producing a 4-way clock port expander which will allow both boards to be connected, along with other clock port expansions. We haven't actually tested one of these splitters yet, but in theory this answers the problem of not being able to use both boards, and may help out space-wise as well since the BVision card intrudes on clock port territory. However, this 4-way adaptor will add another £20 to the equation.



Don't get them mixed up! The top one is the parallel port and the bottom one is the serial port.

The question is whether the quality makes up for price. Head to head it may seem that there's not much separating the Hypercom and IOBlix serial cards but price. Both provide more speed than you're likely to need, with much lower CPU overheads than the internal port. You may never find anything that can keep up, but either will let you use your modem at 56K without problems and will download images from your digital camera as fast as it is capable.

> There's a little too much riding on future add-ons for my liking, but the IOBlix cards have consistently impressed me...

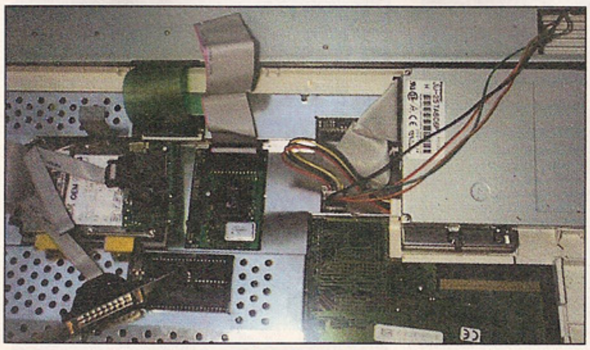
As it turns out, there are other advantages of the IOBlix card. Firstly, there's a small header on the board ready for an IrDA adaptor, an Infra Red serial standard widely used in palmtops and digital cameras. The second advantage is a rather more obscure bonus. Hypercom cards have problems with some of the flakier A1200 motherboard revisions, while the IOBlix cards worked flawlessly in a 1d4 motherboard that hates Hypercom with a vengeance, even when it was loaded up with other add-ons. Maybe it's just luck, but the IOBlix cards seem more stable than the Hypercom cards. That alone could well be worth the price difference.

PACEY PARALLEL

The IOBlix A1200p is a full EPP/ECP parallel interface, compatible with the current standard in the PC world. It's theoretically up to four times faster than the Hypercom port (but don't expect printing to speed up too much as processor power is more of an issue), and is compatible with many modern devices the Amiga normally can't use.

The install disk comes with drivers to allow you to connect a parallel Zip drive and there's promise of support for cheap but fast ECP parallel scanners. As *ScanQuix* and IOBlix come from the same company, we can be reasonably confident that this will actually appear.

There's a little too much riding on future add-ons for my liking, but the IOBlix cards have consistently impressed me so far. Hopefully the 4-way adaptor will work, the IrDA adaptor will see the light of day and lots of drivers will be written. Until then, it's hard to say whether the IOBlix cards are luxury versions of the Hypercom, or if the Hypercom is a poor man's IOBlix.



Now you know where to shove it. If you can change a fuse, you can install an IOBlix1200.

A1200s

SUPPLIER: Eyetech (01642) 713185
PRICE: £49.95
REQUIREMENTS: A1200 with compatible clock port

OVERALL VERDICT: Pricey but high quality fast serial adaptor, and the IrDA option is extremely tempting.

90%

A1200p

SUPPLIER: Eyetech (01642) 713185
PRICE: £49.95
REQUIREMENTS: A1200 with compatible clock port

OVERALL VERDICT: Superb additional parallel port, but there's nothing to really take advantage of it yet.

86%

Amiga Writer

Ben Vost looks at another contender for the word processing crown.

Here we go again. Yet another word processing package tries to prove how it can compete with the word processing heavyweights of this platform and others. There are huge numbers of people who are very satisfied with their copies of *Wordworth*, *Final Writer* or even *Final Copy*, so what can *AmigaWriter* bring to the mix that improves on what these packages already offer?

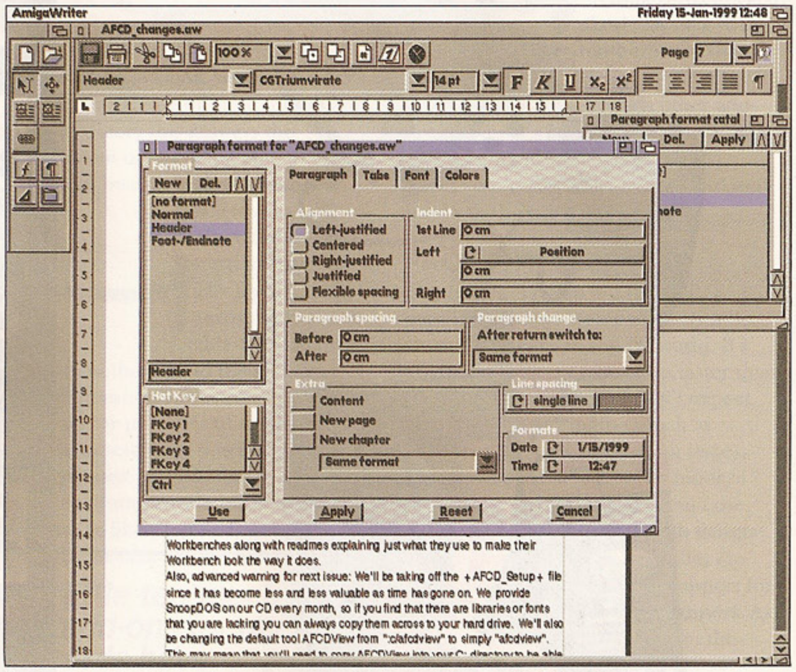
> AmigaWriter does have a very clean interface. Its buttons are well laid out and clear as to their function.

The first thing to bear in mind is that *AmigaWriter* is a very young program. Haage and Partner readily admit that not all the features they'd like to be included are implemented in this current version on test (v1.2). For instance, the only manual you'll get right now is an AmigaGuide document that's already out of date (it's for v1), though you do get a free upgrade to version 2, which will come with a complete printed manual.

There's a document detailing features in 1.2 but it's only available in German, and since it contains the vital instructions for getting the spell checker



Set the DPI for your pictures so they come out correctly on your printer.

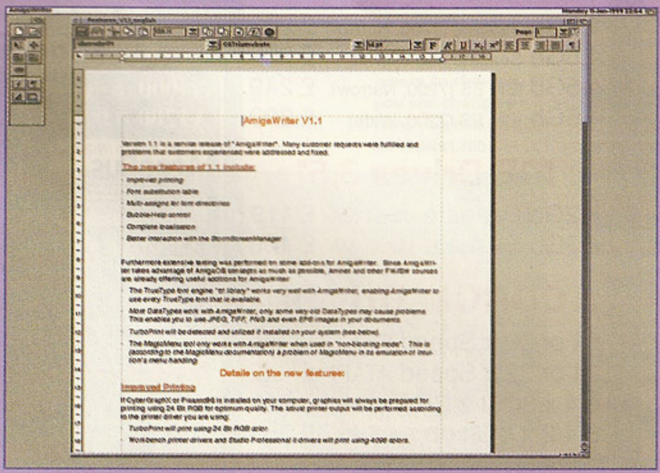


AmigaWriter's style sheets are very comprehensive, if somewhat flaky right now.

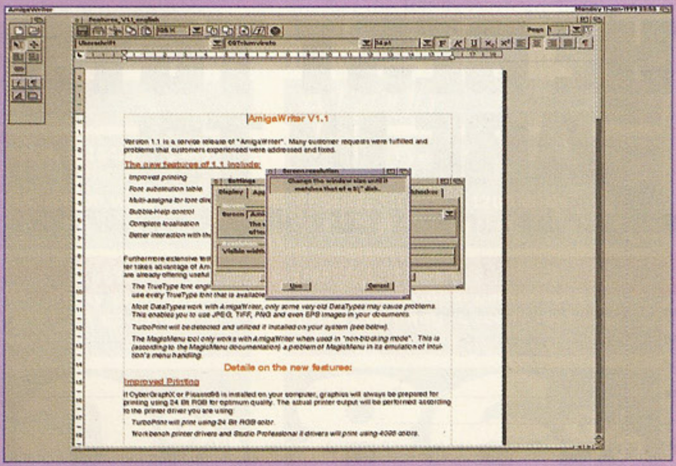
SCREENDPI SETTINGS

The DPI of your screen is important if you want to get a WYSIWYG performance from your program. The way *AmigaWriter* does it is very neat and easy to understand – just match the size of a window on-screen with a floppy disk.

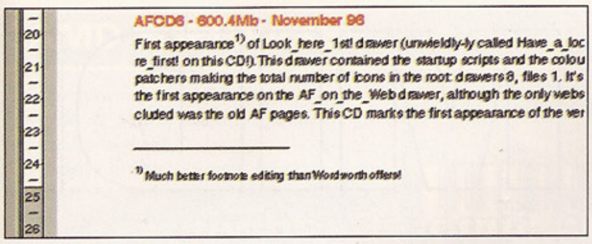
Why do you need to do this? It's so that 100% on-screen is equal to 100% in the real world. If you're using A4 paper, setting your screen DPI accurately will mean that when you select 100% from the screen magnification menu your image on-screen will be the same size as a real bit



The default screen DPI is no good for this resolution.



Sizing the window to disk size results in...



As it says, but there's no facility for endnotes at the moment.

RICH TEXT FORMAT?

RTF or Rich Text Format is a bit of a saviour in these multi-platform days. It's an ASCII text file format that uses standard codes to dictate how a file should be formatted when loaded into an RTF-capable word processing package.

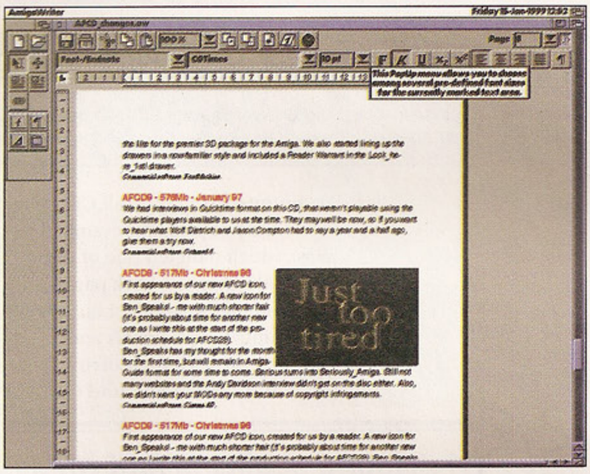
***AmigaWriter* can export RTF files and can import them too, but its implementation isn't complete and some formatting gets lost along the way. Even so, it's still better than having to completely reformat plain ASCII text and I fully anticipate improvements to this module by the time version 2 comes out.**

to work, this is definitely a bad thing. Although v1.2 comes with some sort of spell checking, using *ISpell*, it isn't implemented in a way in which I can make use of – the menu has all the spell checking items ghosted and there are no buttons on the interface that can be clicked. However, v2 promises to have an integrated spell checker that works.

AmigaWriter is pretty fast and has a simple text layout. It can keep up with my typing speed with no effort at all (60 wpm), and even people who have quite a high typing rate have reported no problems on an '060. Unfortunately, as soon as you put text or graphic boxes on the page, things become treacle-like, just as with other Amiga graphical word processors. Worse yet, if you're one of those people who likes their page uncluttered by boxes and text marks, you'll have a hard time with the *AmigaWriter* bug which leaves the boxes on the page even if you've asked for them to be turned off.

You can get around it by selecting the boxes one by one with the box cursor, then de-selecting them, but you shouldn't have to. The lack of an undo function for almost anything is also worrying and will mean that the more fumble-fingered among you will have a hard time with the package.

Instead of using delete, I would recommend that cut, copy and paste are used instead – at least you'll get one undo with them. However, make sure this is only used for text right now since the program won't cut, copy or paste images at the moment.



The bubble help is very useful and easy to turn off too.

It does have a really neat way of linking text boxes together where you can draw out arrows from each box to link it to another.

> *AmigaWriter is pretty fast and has a simple text layout. It can keep up with my typing speed with no effort at all…*

Unfortunately, you need to use this method quite a lot to achieve what would be fairly simple effects in a DTP package or one of the more veteran word publishers.

For instance, drop capitals have to be done completely by hand, and because each box can only allow for one style of word wrap, you have to ensure that only one box is overlapping another. This is a cause for headaches if ever there was one, especially if you intend to do anything more adventurous with the package. There's also no shaped word wrap to follow the contours of an image, and it's hard to set the distance at which text runs around another box.

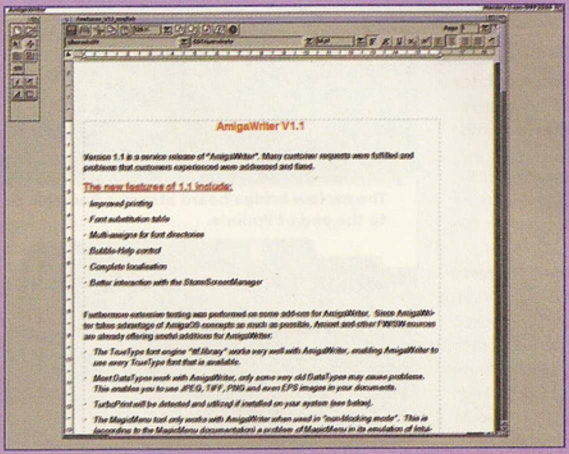
AmigaWriter does have a very clean interface. Its buttons are well laid out and clear as to their function. However, there are a few missing, such as a magnify button that would allow you to zoom in on a particular area of the page and a spell check button.

Also, some of the buttons are still in German, although their help text isn't. I might be familiar with using Fett and Kursiv to mean Bold and Italic, but most English speakers won't be, so replacing the F and the K with B and I would be very useful to them.

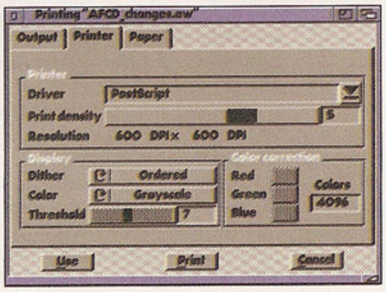
However, there are a great many things about *AmigaWriter* which are very nice, not least of which is the method of setting screen DPI. This is done by using a common 3.5" floppy disk to set the scale of text on your screen and works much better than asking people to measure from corner to corner on their monitor screens. You'll only need to do this for each screenmode you intend using *AmigaWriter* on, but it's this kind of real world touch that a great many other developers could learn from in order to make their software more accessible.

All you do is match the size of the window on-screen with the size of a floppy disk and *AmigaWriter* then works out what screen DPI your monitor is currently displaying.

of paper. Without that, it would be very hard to actually match things together. Unfortunately, *AmigaWriter* doesn't seem exactly right – a 100% image of a piece of A4 on the screen is a bit bigger than a real bit of paper, but it's getting there.



...a much better scale for the window, and more WYSIWYG.



Although it can use preferences printers, *AmigaWriter* is happier with *TurboPrint*.

SUPPLIED BY: Active Software
(01325) 460116
http://www.active-net.co.uk
PRICE: £49.95
REQUIREMENTS: Hard drive

Pros and Cons

- \+ Free upgrade once finished.
- \+ Good style sheets.
- \+ Open, modular concept.
- − No undo.

OVERALL VERDICT:
This is a grower but it's still not good enough yet.

60%

Rombler MIDI

As German product names explore Weirdsville, Simon Goodwin gets to grips with the *Rombler MIDI* add-on for *Prelude*.

Rombler is another add-on board for the Prelude Sound Card from Albrecht Computer Technik. Like MPEGit, reviewed in the last issue of *AF*, Rombler plugs into the feature connector on the end of the Zorro version of Prelude. However, it's not that simple.

Rombler extends Prelude with MIDI input and output, plus links for a high-quality, single-board synthesiser with DSP effects, such as a Yamaha DB50XG, Roland SCM55 or WaveBlaster CT190.

It won't work with integrated PC sound cards, like the DB60XG, which combine the synth hardware with a SoundBlaster or compatible sampling chip set. It needs an add-on card made to fit the 26-way 'feature connector' of a SoundBlaster, rather than all-in-one PC ISA or PCI products.

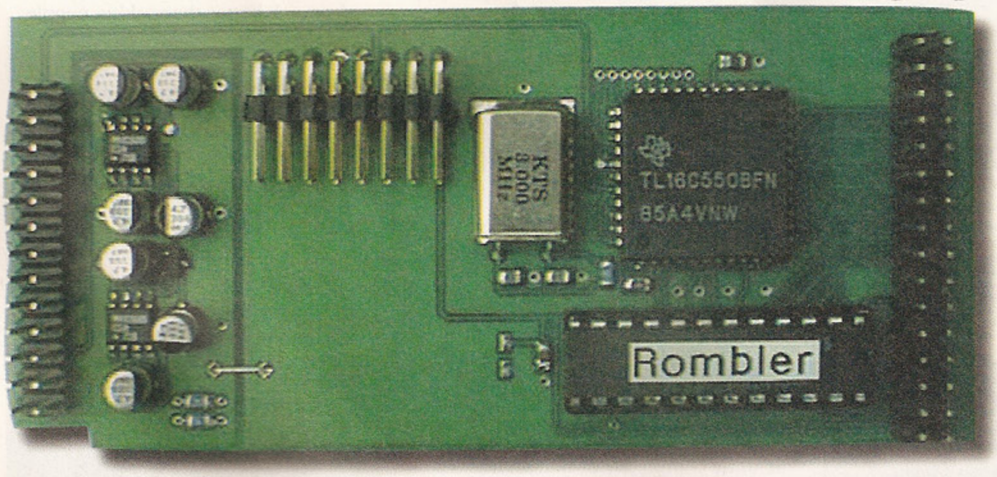
ON THE CD AFCD37:-In_the_mag-/Prelude

ON THIS MONTH'S CD

Your new *AFCD37* In_The_Mag drawer features *CAMD* documentation and utilities. Next month, *AFCD38* will include demonstrations of Rombler WaveTable Synthesis.

DIY enthusiasts may recall Christian Buchner's Aminet project, revamped by *CU Amiga*, which dangled one of these synths onto the Amiga's back panel. Rombler is similar in concept but fits inside the Amiga, with signals and sound routed through the Zorro version of ACT's Prelude sound card.

> ...sound quality is first rate, the signals are automatically mixed and the processor overhead is quite low...



The main Rombler board, with Synth, MIDI and Prelude connectors visible, from left to right

HARDWARE

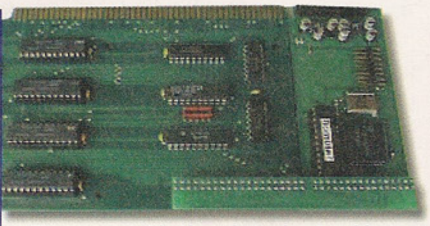
The Rombler comes in three small pieces, plus the optional synthesiser card. A narrow circuit board with two connectors braces signals from the Prelude feature connector to the main Rombler interface, which fits at the end of the Prelude, filling space at the front of the Amiga's Zorro slot.

The synthesiser card flops face down on top of this assembly. A lead from the main Rombler board snakes back to an extra card edge bracket for external MIDI connections.

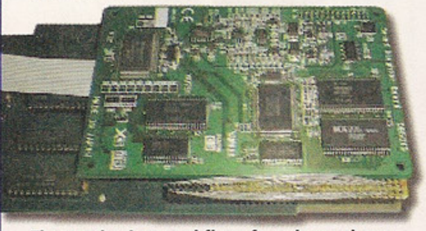
Try as I might, this assembly wouldn't fit my old-model, 7-slot MicroniK tower, so I squeezed it into my A4000 desktop. An additional back panel output is needed for the bracket carrying the external MIDI connector, a PC-gameport 15-way D-type socket, previously unknown on the Amiga.

A cheap adaptor, which isn't included but is available from PC specialists, converts this into 5-pin DIN sockets on flying leads. An illustrated three page A5 guide explains assembly and installation.

MIDI data passes over the Zorro bus to a couple of buffered serial interface chips, and then to the external MIDI ports or internal WaveTable synthesiser. Audio is output to the AUX1 channel of Prelude's built-in stereo mixer, otherwise reserved for CD-ROM audio.



The narrow bridge board attaches Rombler to the end of Prelude.



The synthesiser card flops face down above ACT's assembly.

WAVETABLES AND GENERAL MIDI

MIDI (Musical Instrument Digital Interface) is a serial standard for connecting and controlling audio synthesisers. WaveTable sound cards implement a set of General MIDI standard instruments so musos can be confident that their opus will resemble the original when replayed on disparate hardware.

In practice, there's a big difference between the best and worst implementations of an 'instrument', especially where the original acoustic is subtle and familiar, like a piano, guitar or saxophone. It takes expert sequencing, as well as a good synthesiser, to make these sound realistic.

WaveTable synths use a mixture of sampled sounds, stored in a 4Mb ROM, and additive synthesis, mixing calculated wave shapes. The Yamaha card can play up to 32 sounds in 16 distinct voices at a time.

Besides the 128 standard General MIDI sounds and drum set, you get a Roland GS mode which emulates a TG300 synthesiser with 579 voices and 10 drum sets, plus Yamaha's XG extensions, with 11 drum kits and 480 instruments.

The XG mode is compatible with Yamaha MU50 and MU80 MIDI expanders, which have earned an impressive reputation at much higher prices than the DB50XG board.

The card includes a stereo Digital Signal Processor which dollops reverberation, chorus, tremolo, panning, phasing, flanging, delay, tone or distortion onto the synthesised mix. All parameters are under MIDI control so you can sequence changes just like individual notes.

The DB50XG manual lists 25 pages of MIDI controls and parameters. Its demo CD holds sequencer files in .MID format that you can edit in Amiga sequencers or play straight from your CD drive via *PlayMF*.

CAMD SOFTWARE

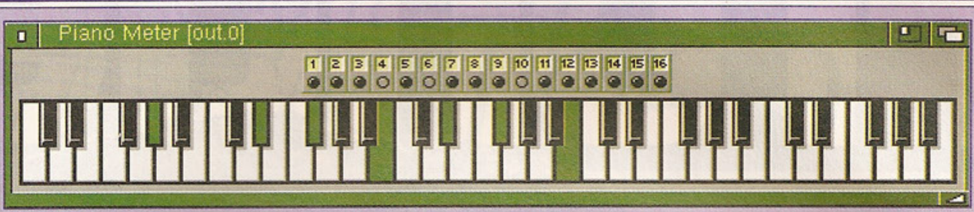
The software supplied with the Rombler is built around the *CAMD* standard, born at Carnegie Mellon University in the USA, and later adopted as Commodore's belated response to the pressure on the Amiga's built-in serial port. This struggled with the MIDI 31250 baud rate on original 16-bit Amigas and needed special metal-banging software like *midi.device*, or worse, to ensure reliable working.

Now we have much faster Amigas and a choice of add-on serial ports, it's a pity classic sequencing software is still coded for an unexpanded A500. Unfortunately, *Sequencer One*, *Dr T's KCS*, *Music X*, *OctaMED* and most of the MIDI tools on Aminet focus on Commodore's old serial hardware.

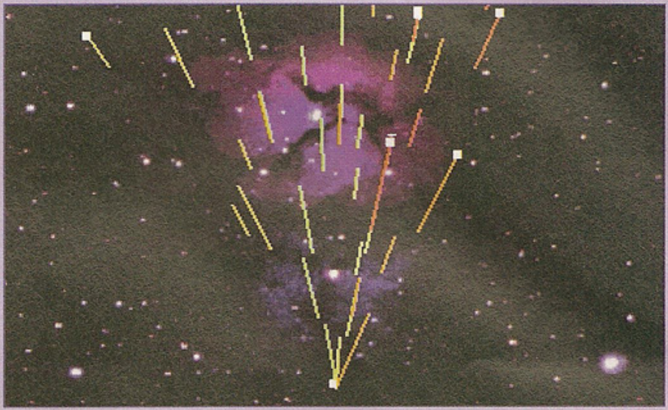
The only commercial music package supporting *CAMD* is *Deluxe Music II*. *AmigaVision* was another early adopter and there's an experimental driver for *Bars and Pipes*. *Euterpe* and the recent sequencer *Camouflage* both support *CAMD* (so far only in German), as will the forthcoming release 10 of *Samplitude Opus*, and the much heralded *Tales of Tamar*.

***CAMD* is on Aminet, *AFCD37* and Amiga Tech's *Developer CD*. It incorporates many nice ideas like time stamps, MIDI filter programs which intercept passing data, adjustable buffers and multiple interfaces, but it's still a bit buggy.**

The *CAMD* preferences program can directly input and output to any port with a driver in DEVS:MIDI. Drivers exist for internal serial, PPS, Prelude and PicassoIV expansion ports. The SAVE option is unreliable, but we got it working after a few tries.

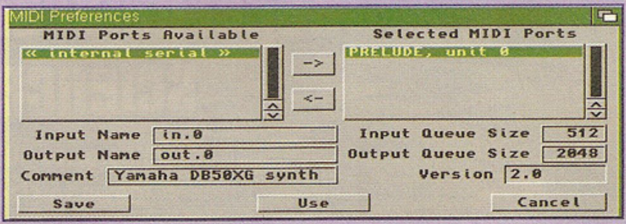


***PianoMeter* shows active MIDI notes and channels in real-time.**

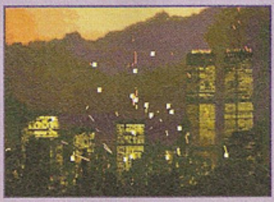


Pitch and volume determine the path of *CAMD Fireworks*.

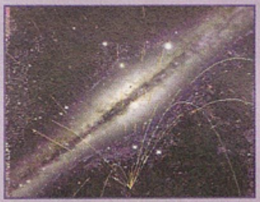
***PlayMF* is a non-nonsense *CAMD* MIDI file player. *Fireworks* and *PianoMeter* interpret MIDI data graphically, animating rockets or piano keys respectively as data is sent or received through *CAMD*. *CAMD* interacted badly after *YAM* was opened on a custom AGA screen, causing display glitches during replay. This could be a problem with *YAM*, *CAMD*, *MUI* or Kickstart 3.1, but it didn't upset any other software.**



***CAMD* MIDI preferences support internal or add-on ports.**



***CAMD Fireworks* offers a choice of effects and backdrops.**



Some *Fireworks* backdrops lose impact in 256 colours.

ASSESSMENT

ACT have struggled to fit a quart into a pint pot. The Rombler is a nice idea, turning Prelude into a one-stop music centre, but the decision to shoehorn a PC MIDI adaptor and synthesiser card into the same Zorro slot is pushing the bounds of the practical.

Once you've got the software and hardware installed, the sound quality is first rate, the signals are automatically mixed and the processor overhead is quite low, but those extra components like wavetable synthesis, MIDI and digital effects don't quite gel with the rest of the Amiga.

There's no way to record the digital synth output without looping it back into Prelude's analogue inputs, and no access to the digital effects for anything except WaveTable sound; you can't use them to process your own recordings, or enhance Prelude's sample playback.

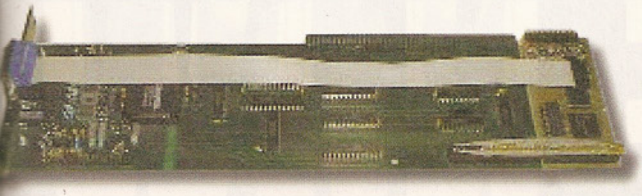
The MIDI output shares the same port as the WaveTable card but you can get around this by assigning distinct channels to internal and external instruments. However, when *CAMD* supports many ports it's a shame Rombler adds only one.

The *CAMD* software is the logical way to add MIDI beyond the Amiga motherboard, but it arrived late in the development of most Amiga MIDI packages, which persist in banging the internal serial port and ignoring add-ons. So far it's better served by hardware than software vendors.

PlayMF does the job and *PianoMeter* and *Fireworks* add some welcome eye candy to the MIDI experience, demonstrating the potential of *CAMD*. However, if you're running an existing MIDI setup, you'll probably need to make changes to accommodate the Rombler approach.

If you own a Zorro Prelude, MPEGit may be better for the feature adaptor, especially if you're more interested in replaying existing tracks than making or editing your own. If MIDI and true hi-fi are your oyster, Rombler could help to turn your Amiga into a creative recording workstation.

Either way, Rombler demonstrates that ACT see Prelude as much more than just another *AHI* platform.



A lead from the main Rombler board runs to the bracket for external MIDI connections.

SUPPLIER: Albrecht Computer Technic, Seth 2 – 21769 Lamstedt, Germany. Telephone: +49 4773 891073. Fax: +49 4773 891072. Email: albrecht@act-net.com, Web: http://www.act-net.com. PRICE: £32 (approx)

Pros and Cons

+ Excellent sound quality from the Yamaha synth module.
+ Ingenious hardware design at a reasonably low price.
– *CAMD* limits the third-party MIDI software support.
– A tight squeeze in a Zorro slot, but it does fit – just!

OVERALL VERDICT: Anyone for a genuinely hi-fi music centre?

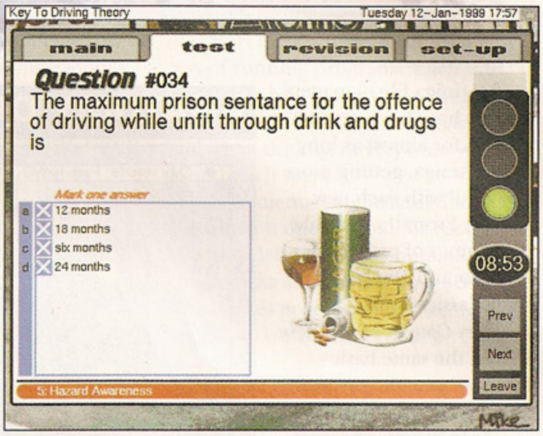
69%



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Key to Driving Theory

Ben Vost should be looking at that car ahead, instead of his Amiga… aaargh!



Umm, "sentance"? Even if I got the question wrong, I'd still have a smug sense of superiority…

As a non-driver, it might seem strange that I should be taking this test, but I asked myself who was more likely to be doing so – me or someone who'd already passed?

I know a lot of drivers who probably wouldn't pass the test if they took it now, but they've honed their skills of tailgating, using the fog light inappropriately and road rage to the kind of degree where perhaps you wouldn't want them to anyway. Instead, you just hope that they'll get involved in some kind of traffic accident.

> So, overall then, a cracking title for budding learner drivers getting to grips with their cars and exams…

Anyway, I decided to take a look at Epic's latest offering for budding learner drivers and I have to say that I'm quite impressed. You get a single CD that you can bung in your drive and fire up. Then all you need to do is double click on the Driving Theory icon contained within and you're away.

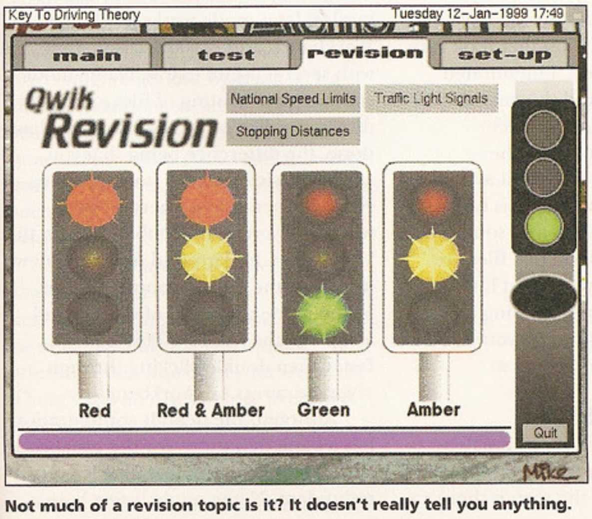
REVVING UP

Although the program makes use of a Hi Res Lace screen mode, the flicker isn't bad at all and the added screen real estate makes it very worthwhile. You'll get a "fatal" error when you start the program for the first time (and thereafter, if you don't save your settings) that isn't fatal at all, and somewhat unnecessary unless your default settings absolutely have to be 187 questions within five minutes.

The questions themselves are a database of the six hundred used by the proper driving test board, so you should be familiar with them by the time you actually take your exam. However, the ones the board use probably don't have any spelling mistakes in them, such as "saftey", "sentance" and "vehciles", but these are simply typos, although I fully expect to see them corrected for the next revision of this software – it's inexcusable to ship a title with such obvious mistakes.

Don't expect this program to help you much with learning your Highway Code as you'll still need a book for that. This program is purely a test of your knowledge of the Highway Code – it won't even tell you precisely which questions you got wrong, or what the correct answers are, just what categories you got questions wrong in.

The revision part of the program isn't overly developed either. Although you might think it would have things like road signs, hand signals and the like in it, it only has national speed limits, stopping distances (admittedly with a handy way of working them out) and an almost useless guide to the colours of traffic lights.

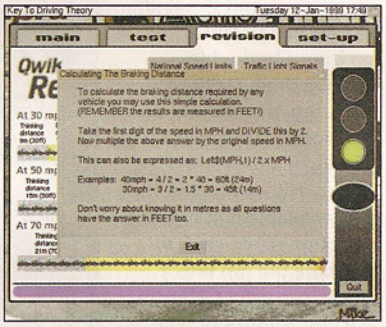


Not much of a revision topic is it? It doesn't really tell you anything.

SMOOTH RUNNING

The fact that this program worked immediately when I put the CD in the drive, and that it's been tested on a fairly wide range of machines so that it's likely to work with yours, should mean that it'll be a success. The sounds are something else too, and something that the author has obviously enjoyed doing, although they can get on your nerves after a while.

So, overall then, a cracking title for budding learner drivers getting to grips with their cars and exams – cars only though, as there are no motorcycle questions in this program.



This bit for working out a stopping distance is handy, but what about when it's wet?

If it wasn't for the spelling mistakes and the annoying fatal error requestor, I'd have no hesitation in giving it top marks. As it is, it's still very good and invaluable if you need it, but I'd say it's just a pass.

SUPPLIED BY: Epic Marketing (0500) 131486
REQUIREMENTS: AGA machine with some fast RAM
PRICE: £14.99

Pros and Cons

+ Works well straight away.
+ Good range of questions.
+ Looks great.
- Annoying spelling mistakes.

OVERALL VERDICT:
A very good title and one that will be invaluable for learner drivers.

83%

Opus Magellan 2

AMIGA GOLD FORMAT

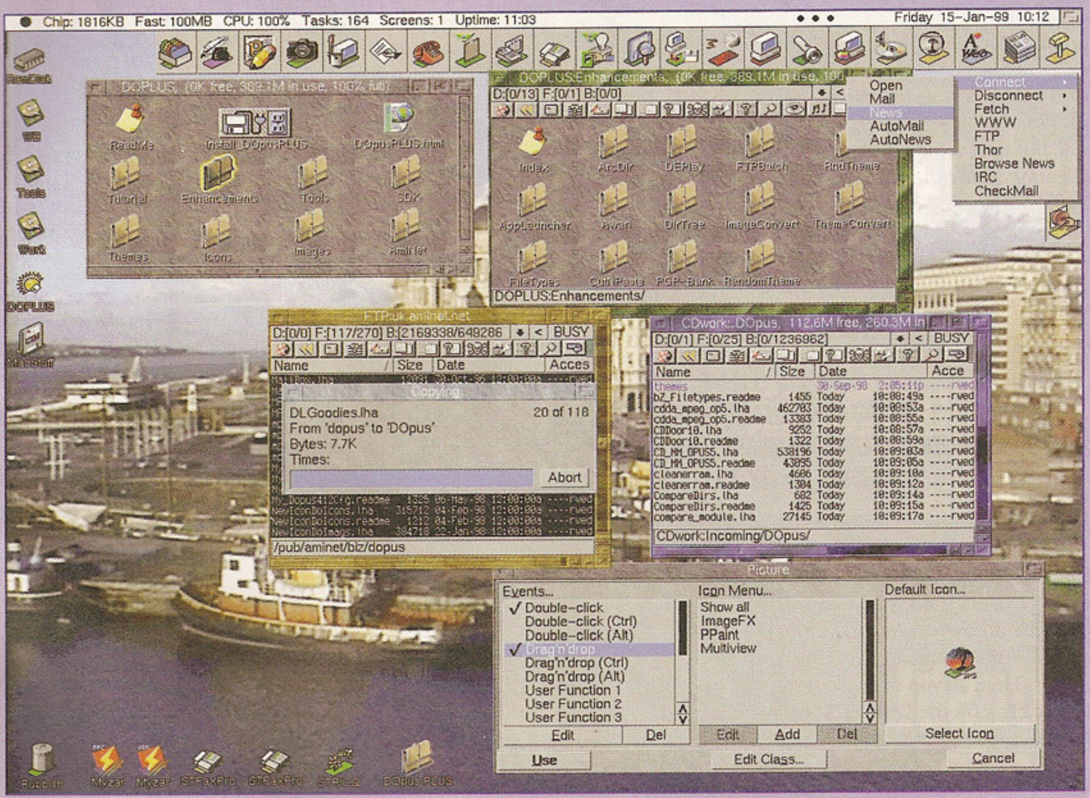
Neil Bothwick reckons it's time you got rid of your old Workbench, and he's found the perfect replacement.

Amiga file managers have been around for almost as long as the Amiga, getting more powerful with each new release. From the humble beginnings of programs like *Dux* and *DirUtil* grew such classics as *SID2* and *Directory Opus 4*. All of these shared the same basic layout of two file windows and a bank of buttons.

As they grew in power they gained file recognition and the ability to view files or run programs by double-clicking them. At the same time, the Amiga's own file manager, Workbench, was gaining features and power. With hindsight, it was inevitable that someone would work to combine the two into a single, powerful GUI with the best features of both Workbench and the file managers. That's what happened a few years ago with *Directory Opus 5* and, after several upgrades, *Opus Magellan II* adds even more features, power and speed to Workbench.

Magellan II, like its predecessor, is a full Workbench replacement. Rather than running it as a separate program on its own screen and switching to it whenever you need to copy, delete or view files, it forms an integral part of the familiar Workbench environment, adding its power and ease of use to all Workbench operations.

ANATOMY OF MAGELLAN 2



A customised *Opus* Workbench. The backdrop is picked at random on each reboot and the toolbar at the top is a button bank to launch programs. Just below this on the right are three start menus. The two windows near the top are in Icon and Icon Action modes, and below these are two listers, copying files from Aminet to the hard drive. The bottom window is the FileType editor, configuring a Picture FileType. The icon position preferences are set to display disk icons down the left side of the screen and AppIcons along the bottom.

> ...it forms an integral part of the familiar Workbench environment, adding its power and ease of use...

INSTALLATION

Magellan II is available as an update to the previous versions, and first time buyers get a set of *Opus 5.5* disks and the *Magellan II* update disk. They need to install 5.5 first and then update it to *Magellan II*. It's no big deal having to run two installers, but it would have been better if a single installer took care of the whole operation. I mentioned this to GP Software and the next run of disks may have a single installer.

To get the full power of the program, you need to install it as a Workbench Replacement. This isn't as dramatic for your system as it sounds as all your standard Workbench files are left intact and you can still get into a standard Workbench by holding a shift key when booting, although you'll soon wonder why you ever wanted to.

FIRST IMPRESSIONS

Rebooting after installation reveals a Workbench with very few apparent changes, but behind the scenes there's a lot more power waiting for you. An *Opus* lister can be displayed in one of three modes. Icon mode works just like Workbench and is 100% compatible, but with several useful extras. Name mode shows a sorted listing of files and directories like other file managers have done, the difference being that you aren't restricted to two static windows – you can open listers wherever and whenever you want. Double-click on the Workbench background to open a new lister and the default setup opens in Name mode with a list of devices and assigns in the window. This is much faster than double-clicking through several drawers on Workbench.

Although the default configuration has a bank of buttons for the usual copy and delete functions, etc, this is pretty redundant. Name mode listers have a

WHAT'S NEW

New features for *Magellan II* include:
- Listers use proportional fonts and have inline editing of file names.
- Themes to customise the appearance of Workbench.
- Outline and shadow fonts for icon text.
- Configurable screen title to show system and other information.
- Support for long file names (up to 107 characters).
- Sound events.
- Improved button banks and start menus with sub menus and active popups.
- Enhanced FileType identification and matching.
- Faster icon displays.
- *NewIcon* information requestor with the ability to change icon parameters and edit the images.
- Completely new FTP module to integrate remote sites into Workbench.

toolbar across the top of each lister covering the main functions; user-configurable, of course, with a menu of other operations. Almost everything about a Name mode lister is configurable, from the information listed for each file and the order they're listed in to the size, colour and placement of the lister. In addition to the default settings, you can have custom setups for specific directories.

The third display mode is Icon Action. This has an icon display like Workbench but with many of the features of Name mode, such as lister toolbars and menus. Drag and drop is fully supported for copying and moving files and, as with everything else, if you don't like the default actions you can change them.

Unlike Workbench, *Opus* is fully multi-threaded. Try copying a file from a floppy disk with Workbench and you'll have to wait for it to finish before you can use any other Workbench windows. With *Opus*, only the listers involved in the copy are affected – all of the others continue to work.

THEMES

I doubt many people still use a four-colour, grey and blue Workbench, so it's good to know that *Magellan* users can customise most visual aspects of their Workbench. Separate background images for the Workbench, listers and requestors are configurable, and *Opus* will pick a different random backdrop each time it starts, if you wish. Sounds can also be attached to various events and an audible warning of errors, or when long processes such as FTP file transfers are completed, is useful.

New for *Magellan II* is the ability to save out a set of background, sound, font and colour settings as a theme. These can be reloaded and changed without affecting other aspects of your setup. There's also an ARexx script to convert existing Windows themes to the *Opus* format, so now you can make your Workbench look and sound like your favourite TV show, film, sport or whatever.

FILETYPES AND AREXX

One of the most powerful features of *Opus*, further enhanced in *Magellan*, is its FileType recognition. It comes with a large selection of pre-defined FileTypes, and new ones can be added and existing ones modified through its FileType editor. For each FileType you may define actions to be performed on double-click, control double-click, drag and drop and user functions. You may also define the default icon image to be used in Icon and Icon Action modes.

In any of the display modes, a popup menu appears when you press the right mouse button on the file name or icon. This menu contains standard commands that you may add to for each FileType. For example, the double click action of the ILBM FileType is to show it with *Opus'* internal viewer, but graphics card owners would probably change this to another viewer and add menu items to load the image into *PPaint*, *ImageFX*, *ImageStudio* or all three.

Anything you can do directly with *Opus* can also be done through its ARexx interface. Don't worry if you don't know ARexx as there are many scripts already available to add features and power.

The ArcDir script makes *LhA* and *LZX* archives behave as if they were directories. Double-clicking on an archive displays the contents in the lister and these can be copied, viewed or deleted like any other file. Copying files into the lister adds them to the archive. Dragging an archive into another lister unpacks it into that lister with no need for scripts or buttons.

> **"New for Magellan II is the ability to save out a set of background, sound, font and colour settings as a Theme."**

THE WORLD ON YOUR WORKBENCH

The FTP module has been completely overhauled. Any FTP site can be opened in a lister as if it was a drive on your machine. There's no need for any special FTP commands and you can set the default behaviour for FTP listers, as well as the specific parameters for each site.

The ability to copy entire directories, along with the option to only copy files newer than those in the destination window, makes updating a website as easy as opening two listers, pressing Select All and then Copy.

Set a sound sample to play when FTP copies finish and you don't even have to wait to see when it's finished. It's also possible to execute scripts on FTP events, such as taking your TCP stack offline when the copy is finished.

BUTTONS, MENUS AND MORE

Opus supports button banks, but these are a far cry from the old text-based buttons. Icons can be used for buttons, with added backgrounds, and each button may have as many actions as you wish. The first three are handled by the mouse buttons and the rest by a popup menu. An action can be to run an *Opus* command on the current lister, start a program or open another lister.

Start menus provide another easy way of running programs. Each start menu can have up to three levels of options, providing a wide range of actions at the cost of very little Workbench space.

User menus can be added to the Workbench title bar and for each menu you may define as many options and sub options as will fit on your screen. This makes programs like *ToolManager* and *ToolsDaemon* unnecessary.

IS IT WORTH IT?

Opus Magellan is a powerful program, with a huge range of configuration options. This has a price in that to get the most from it requires some effort from the user if they want to set it up to suit their own needs – as the saying goes, there's no gain without pain.

However, an initial setup that demonstrates more features would be a better starting point than the current one. If you want to just copy a file from A to B then this isn't necessarily for you – it would be like using a Porsche to go to the supermarket. If you want to improve the speed and efficiency of your Workbench in a way that suits your needs, though, this is the way to go.

The upgrade price from the previous version is a little higher than expected, but there's nothing that can compare, on the Amiga or any other platform. The answer to the question has to be that it's well worth it.

UK SUPPLIER: Compute! 0181 3031800.
PRICE: £49.99 (upgrade from Magellan, £34.99) inc P&P.
REQUIRES: OS 2.1 and 2Mb RAM.
TESTED ON: A4000/'060/PPC and A4000/'040.

Pros and Cons

- \+ It's now completely configurable.
- \+ Much faster to use than Workbench.
- \+ FileTypes and ARexx allow almost unlimited expansion.
- − Needs some effort to get the most from its configuration options.

OVERALL VERDICT: Well worth having. Once you've used it, you'll never want to go back to Workbench again.

97%

DOpus Plus

Neil Bothwick examines the first add-on for Opus Magellan II.

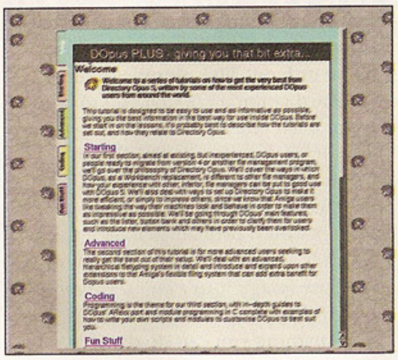
After you've read the review of *Opus Magellan II* you'll see I really rate it, and if you haven't read it, go and do so right now. *DOpus Plus* is a support CD, described as *The Essential Companion to Opus Magellan II*, but is it really essential, and just how good is it?

Opus Magellan II comes with a comprehensive manual so this CD isn't really essential. You can install, configure and use *Opus* using the manual alone, but *Opus* is a powerful program with a lot of features and options. *DOpus Plus* contains a set of tutorials, covering the full range from information for new users to reference documentation for those wishing to program add-on modules in ARexx or *C*.

> DOPus Plus isn't absolutely essential but it does contain a huge amount of information, scripts, themes, etc...

The basic tutorials cover things like upgrading from earlier versions and how to use the new features of *Magellan II* in step by step fashion, taking up from where the manual stops.

The next section goes on to cover the more advanced aspects of *Opus*. In many cases the same topics are covered in both sections, the first one showing you how to set them up and use them, with the Advanced section covering the more in-depth and powerful aspects of the features. Handy tips are liberally sprinkled throughout all of the tutorials.



The starting point for the tutorials.

The tutorials are presented in HTML, ready to be viewed in a web browser. You don't need an Internet connection to use this and there's a choice of browsers on the CD.

You may install the CD, which adds a program group to Workbench and asks for your choice of browser. This doesn't copy the tutorials to your hard drive and you still need the CD in the drive to use them, but it does make them more accessible.

CODING

The ARexx tutorial provides a comprehensive tour of the ARexx capabilities of *Opus*, going into far more detail than the manual could. There are plenty of examples of individual functions and a number of complete scripts too. This was originally written as an AmigaGuide and converted to HTML, and it shows in places – you may need to fiddle with your browser's font settings to be able to read it without having to scroll the page sideways.

The original AmigaGuide version is also supplied in case you would prefer to use this. The content is the same; only the layout has changed.

For the real power user there's a guide to programming modules in *C*, along with the *Opus Software Development Kit (SDK)*. This guide is also converted from AmigaGuide with the original on the CD, so the above comments apply.

THERE'S MORE

The final section is a miscellaneous collection of information, hints and tips, things that wouldn't fit into any of the previous categories. I've been using *Opus* intensively for over two years, but I still managed to find new things in here. The Aminet drawer contains all the files from the biz/dopus section of Aminet, with 135 archives containing ARexx scripts, FileTypes, icons and more. There are several more scripts and FileTypes in the Enhancements drawer. If none of the icons or backdrops suit your needs, there's even a copy of *PPaint* to enable you to make your own.

The original question asked whether this was really essential, and how good it was. *DOpus Plus* isn't absolutely essential but it does contain a huge amount of information, scripts, themes and other useful files. Much of what is on here can be found on the net, but that assumes you have a net connection, that you don't pay your own phone bill and that you know where to look. As an all-in-one resource for *Opus Magellan II* users, *DOpus Plus* is well worth serious consideration.

SUPERFLUOUS GLITZ?

Themes are a major addition to *Magellan II* but there's no space on the disks for any samples. *DOpus Plus* contains several themes ready to load into *Opus*, along with many more Windows themes that may be converted with the ConvertTheme command.

This converts the .theme files into *Opus* format but makes no changes to the image and sound files. These are usually in JPEG, GIF and WAV formats and there's an ARexx script supplied to convert these to native Amiga image and sound files. The RndTheme script can be used to have your Amiga display a different theme each time it starts up.

The theme index shows thumbnails of each theme's backdrop, displaying the complete picture when you click on a thumbnail. Once again the theme index is in HTML, to be viewed in your favourite browser. There are vast numbers of Windows themes on the Internet that can be downloaded and converted, so Internet users may feel there's less need for this CD, but with over 300Mb of themes on this CD, that's a lot of time saved in searching and downloading.



Each set of themes has a thumbnail index.

UK SUPPLIER: Compute! 0181 3031800
PRICE: £24.99
REQUIRES: Directory Opus Magellan II, OS 3.0+ for the browsers
TESTED ON: A4000/'060/PPC and A4000/'040

Pros and Cons

- + Clear, easy to follow tutorials with plenty of examples.
- + Many themes so you can change the look of your Workbench.
- + A complete collection of *Opus*-related files and information.
- − Apart from the tutorials, much of this CD is on the net.

OVERALL VERDICT: A useful collection of information and files. Not essential, but very useful.

88%

SequencerOne+

Reader Reviews

John Garrington finds that music sounds better with this sequencer.

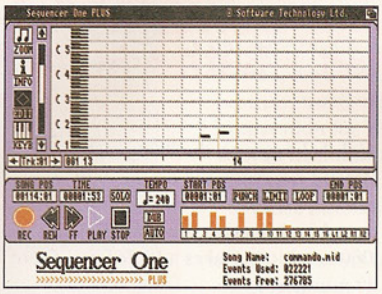
When it comes to making music on the Amiga, you can either use a tracker-based program or a midi sequencer. Let's assume that, like me, you can't use a tracker to save your life. What software do you choose? The favourite was *Music X*, then there's always *Bars & Pipes Pro*. *Music X* and *Bars & Pipes* are no more and you won't get support for them, or a detailed manual. For me, *Sequencer One +* was the only choice, and what's more, it's still on sale and support for it is growing.

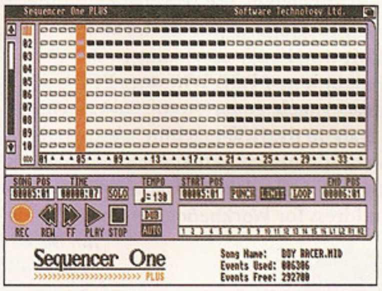
The graphics aren't state of the art but it more than makes up for this with its ease of use and flexibility. Although it's nearly six years old it supports hard drives, extra RAM and faster processors. Just create a drawer on your hard drive, drag it there and save the set up. Next time you want to use it you can simply open it from Workbench.

MAGICAL MYSTERY TOUR

There are 5 main screens within *Sequencer One +* and I'll briefly take you through them all. The Track screen is nicely set out with 32 numbered tracks to the left, current track rec. indicator, mute icon, MIDI channel number, or L/R Amiga audio channels. If 32 tracks aren't enough, you can always link another Amiga with an additional copy of *Sequencer One +* for 64 tracks. I've never actually used all 32 so there's plenty of room.

On the track screen, just click with the mouse on the track space and enter your choice of track name. The controls are easy to use, just like a tape deck. You can select a count in or specify a start position. You can also go to the bar editor screen, highlight a range and hit loop. This will repeat a section of your song, which is handy for getting those high-hats down. A nice MIDI channel indicator lights up when playing in the box on the bottom right of the screen. When using Dub, you can overlay notes on the same track without erasing the previous notation.

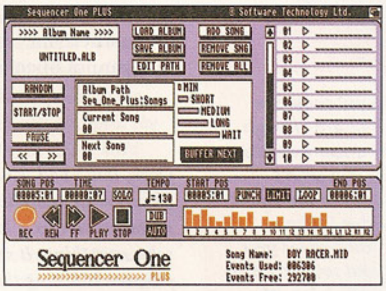




You'll probably spend most of your time in the Note Editor (top). The Block Editor is handy for allowing you to set loops for your songs (above).

In my opinion, one of the best features is SysEx, which only takes a few seconds to exchange the information. With this feature alone it's worth the retail price. If you have a hard drive you can dump all these to a SysEx drawer. Another feature is the ability to import standard MIDI files, and even XG MIDI files for the Yamaha MU10. You can also export songs as standard MIDI files, type 0 or 1.

If you want to sequence internal samples, you can load up to 128 eight-bit IFF samples, but this is limited to chip RAM only. The sample series comes with loads of well recorded samples just for this purpose.



Use the Jukebox to chain together a load of songs for a concert or album.

STEP ON

The Step Editor screen gives you great flexibility with its Diamond Drag note editing. For example, if you make one duff note in a piano solo, you can just drag it to the correct place. You can also adjust velocity and length, and delete notes. There's even an on-screen keyboard for step entry of notes. You can easily click between tracks on both the Bar and Step Editor screens without the need to go back to the Track screen.

You can save MIDI notes as blocks, which is good for making variations in your drum patterns, for instance. *The Hit Kit* comes with loads of blocks in many different musical styles. Like any good MIDI sequencer, standard features include quantize, transpose, undo, edit, cut, copy and paste. You can even set your own time signature and make written notes on each song.

When I recorded my first album in a studio, my Amiga was controlled by an Alesis ADAT controller. Just select MIDI, extsync and press play. You can then control the Amiga and your synths from any external MIDI device.

One final feature is the Jukebox, which works just like a CD player. The best use for this is during a live gig. Select the running order of your songs and your Amiga will do the rest while you play lead or do vocals.

YOUR REVIEWS

Have you got any software or hardware you couldn't live without? Got any that you'd happily chuck in the bin? Write a fair and accurate review of about 750 words and you could see your work appear in *AF*!

We will also need some good photographs of any hardware you review and a passport photo of you. Send your reviews to:

***Amiga Format* • Reader Reviews • 30 Monmouth Street • Bath • Somerset • BA1 2BW.**

ON THE CD



The two tracks featured on the cover CD were done purely using *Sequencer One +* on a standard A1200. They were recorded in a studio with effects, but with another Amiga running effects this could all be done at home. At any one time I used 10 Synths with my Amiga and it never let me down. The best thing about *Sequencer One +* is that this software works on any Amiga so anyone can pick up a basic A500 and get sequencing for a fraction of the professional cost. The only thing left to say is that if you're serious about MIDI music, buy *Sequencer One +* and don't forget the MIDI box.

BEN'S VERDICT

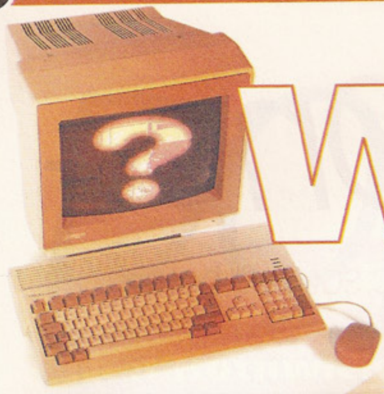
There's no doubt that if you're into MIDI then getting a MIDI sequencer like John mentions is essential. I'm pretty sure Tony Horgan would agree, too.

***Sequencer One* fell by the wayside a long time ago, which is a shame since it obviously has a lot of extremely useful features, some of which are presumably better than *Music X*. Hopefully its resurrection by Epic Marketing will see it gain a whole new audience.**

DISTRIBUTORS: Epic Marketing
PRICE: £39.99. (Sequencer One +, The Hit Kit and The Sample Series, £59.99.)

OVERALL VERDICT:
Great features and good support make this a brilliant package.

95%



Workbench

Technical queries solved by **John Kennedy**. Email: amformat@futurenet.co.uk, putting Workbench in the subject line, or write to: **Workbench • Amiga Format • 30 Monmouth Street • Bath • Somerset • BA1 2BW.**

SLOW UP BOARD?

I have an A1200, an Apollo '060 accelerator with 32Mb of RAM and a 2.1Gb hard drive, running Workbench 3.1. I also have an A1200 with a Blizzard '030 accelerator with 16Mb of RAM and a 2.1Gb hard drive, running Workbench 3.1. Both hard drives are partitioned the same and the contents of the boot partition on each machine is identical, except that the '060 machine has the Apollo stuff on it, like the '060 library.

The startup sequences on both machines are identical, as are the user startups. The only difference between the two machines is that the '060 machine, having a proper monitor, runs Workbench in Hi Res Laced 256 colours, while the '030 machine, using a TV as a monitor, runs Workbench in Hi Res 256 colours.

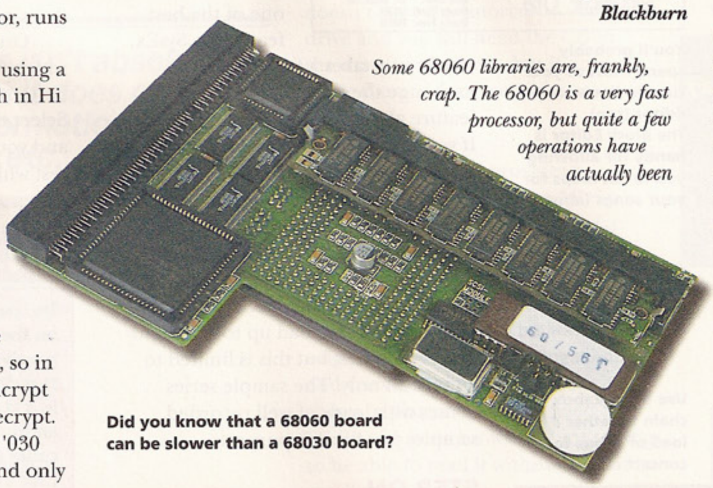
When I generate the Public/Secret key, etc, it takes about 15 minutes on the '030 machine. When I do the same thing on the '060 machine using the same parameters it takes over an hour. I realise that encryption/decryption times are dependent on the size of the file, so in tests I've used the same file to encrypt and then the encrypted file to decrypt.

When I encrypt a file on the '030 machine it takes a few seconds and only slightly longer on the '060 machine. When I decrypt a file on the '030 machine it takes less than half a minute, but when I decrypt the same file on the '060 machine it takes a lot longer, about 20 minutes.

If I change the Workbench on the '060 machine to just Hi Res at 256 colours, there's no change in the operation of PGP. Why does PGP 2.6.3i work much slower on the '060 machine than on the '030 machine? And no, I haven't mixed up the machines in my tests. Finally, do you have an email address for Workbench?

Jim Buckley
Blackburn

Some 68060 libraries are, frankly, crap. The 68060 is a very fast processor, but quite a few operations have actually been moved from silicon to software. In other words, the Amiga ends up doing the work of the 68060 in software, so if an application makes heavy use of these outboard instructions – typically floating point operations – the results can be slightly disappointing. The 68030, on the other hand, has room on-board for lots of instructions and so everything is done in silicon. It's possible to use different 68060 libraries and there are various patches which can make an incredible difference to the performance. I'm not sure if this is available for the Apollo 68060 card, so contact your supplier and scour the Internet. Finally, you can email Workbench at the address above.



Did you know that a 68060 board can be slower than a 68030 board?

GOOD OLD DAYS

I've recently purchased two old games for my A1200 (*Death Knights of Krynn* and *Champions of Krynn*). After installing them to my hard drive I reset my system and clicked on the *COK* icon. Everything worked okay, up to the point where I used a character to cast a spell. When the sound effects for the spell came on, the game crashed with GURU 8000 0004. It was the same for *DKOK* too, and on any spell used. I've tried to disable the CPU and I've used different chipset settings and also various degraders, but all with no luck.

Also, I have various games on floppy that work fine but if I install them on hard drive they fail. I've run *SnoopDOS* to see where they're failing and it says they cannot open various ToolTypes.

Russell Smith
Perton

Oooh, that's bad. Running old games is always a hit and miss affair, and although degraders can fix a lot of problems, they can't solve everything. It seems as though the program is hitting the hardware in a way which it just shouldn't be doing, and the result is that rather nasty error. I'm afraid I don't know what else to suggest, although for the price of another game you should be able to pick up a well-used A500. When software degrading won't work, you can always resort to the brute force technique.

When you install them on the hard drive, you're copying the files to hard disk but you aren't mimicking the various assigns which occur when a game is loaded from floppy. In

HARD WORK

I have recently had a 260Mb hard drive and 8Mb memory upgrade fitted to my A1200 but I can't find any written information for it. The Workbench manual refers to an *Amiga Hard Drive User's Guide*. Do you know where I can get a copy of this?

When loading a floppy in the internal drive I sometimes get the error report 'error at line 1' and sometimes 'failed return code 10'. I think there's a way around this but I don't know what. I also got copies of *Amos Pro* and *Easy Amos* from *AF*'s Reader Ads but I think the discs may be corrupted. Can you tell me where the *Amos* library is?

I realise the answers to some of these questions may be in *AF* mags and I'm dredging through them for info. Would it be possible to publish an issue index of technical information, perhaps on a coverdisk? I realise this would be an ongoing task, but it would be very useful.

D. Barugh
Middlesbrough

I think you would be lucky if you found someone selling the Hard Drive User Guide: it's hard enough to get the software, never mind the documentation. The good news (well, sort of) is that you aren't missing much. I have the guide in front of me and it essentially tells you that the hard drive is like a bigger and faster floppy drive, and then gives you some information on copying files and setting up an Assign statement if your software complains. It's pretty obvious stuff which has been covered in many issues of AF, to be honest.

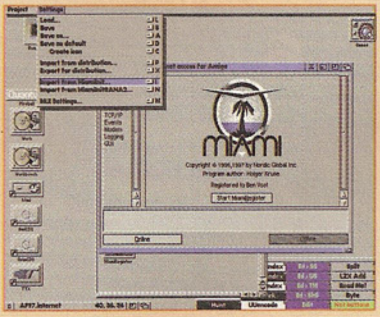
If you get a lot of errors from floppy disks, it could either be a hardware problem (the disk drive is drifting out of alignment, the heads are dirty or the disk is corrupted) or a software problem (the program is misbehaving – perhaps it's expecting to be loaded without your system booting from hard drive first). The Amos library should be on the disks somewhere; you'll probably find it in a directory called LIBS or something similar.

A600 ONLINE?

Since 1994 I have been using my bog standard A600 primarily as a word processor and occasionally as a games machine. Until recently I had always dismissed the possibility of this machine being linked to the Internet. However, a work colleague recently informed me that it is possible and fairly cheap to do. Is this true or is my friend wrong?

After reading the Christmas issue, I've noticed that most hardware adverts in your magazine refer to the A1200. Will A1200 modems, hard drives, RAM expansions, etc, work on an A600?

Ross Trousdale
Ayr



Is an A600 really fast enough for the Internet? Well, yes and no.

Your friend isn't wrong, but he could be oversimplifying things just ever so slightly. If your A600 doesn't have a hard drive, the process of installing and using all the Internet software will be slow and tedious. The A600 isn't the world's faster computer and so any web browsing software will be very slow. However, if you persevere you can use standard modems and software such as Miami to get online.

The A1200 is quite different from the A600 and offers considerably more in the way of expansion. A modem uses the serial port, which both computers have, and so that isn't a problem. However, memory is: A1200 memory and processor expansions won't work on an A600. The A600 has a simplified trapdoor interface which can only take a second 1Mb of memory. It's possible to get speed-up boards which clip over the A600's weedy 68000 processor, but my advice is to look for a second-hand A1200 before spending any money on your A600.

other words, when you try to run the game your computer is looking to, say, LIBS: on your hard drive and not on the floppy.

The floppy version of LIBS: (which gets assigns when the system boots from a floppy) contains files which aren't present in the hard drive version. In this case, it's slightly different. The icon which launches the game contains a reference to a particular tool (program). The program can't be found, for the above reasons, or the reference includes a direct link to the floppy disk. You can check this by opening the Information window of the icon and reading the ToolType setting.

You can then edit this to point to the hard drive, ensuring that you've copied the necessary files from the floppy to the hard drive, of course.

TEXT ONLY

My brother has an old Amiga 500 and he uses it for school work. All he wants is to be able to print stuff out from *Ed* (yes, the Workbench text editor) onto pieces of A4 paper.

What I'm looking for is an inkjet which will hook up to the Amiga but won't cost more than about £100. Are there any inkjets out there that would do the job, and will I need a special cable? If so, where will I get one?

Imran Khan
Headingly

Any cheap inkjet should work fine as they will support the basic printer codes needed for plain text. It's probably a good idea to look at the Reader Ads in AF, *the ads in your local paper or place a wanted ad yourself. You should be able to pick up a black and white inkjet for next to nothing as lots of people are upgrading to colour printers these days.*

POWER PROBLEM

My daughter has an A1200 in an Eyetech EZ Tower with CD-ROM, Zip and a 4.3Gb hard disk. The motherboard is one manufactured by Commodore. While we still use WB3, we recently installed Kickstart 3.1 in preparation for WB3.5 and also because we now have a Blizzard PPC603+/240MHz+ '060 with 32Mb.

Since installing the PPC we've come across a couple of problems and would appreciate some help in trying to sort them out.

After installing the PPC and software, it failed to work (it just refuses to boot) with *IDEFix*. Being unable to solve this problem, I took it to Analogic who installed their own version of *IDE Fix* which worked. However, it didn't include a Zip driver so, at present, I can't get at everything I had backed up to Zip.



Blizzards can be very bad for *Worms*, you know.

Also, my daughter is crazy about *Worms DC*, which again was working fine until I installed the PPC. Now it runs until one of the worms lands in the water, then the program just locks up. It does this on both the full version and the demo from *AF92*. Not knowing much about computers myself, these problems are a real headache. I'd even briefly considered replacing the A1200 with a PC but I'll resist this temptation for as long as possible.

Chris Goffin
Norwich

The Amiga is having a hard time keeping up with the latest developments, I'm afraid. When you improve something, you find that you've broken something else instead. Unless someone has written a driver for the Zip drive which is compatible with your new processor, there isn't a lot you can do, I'm afraid. If such a thing exists, perhaps someone will be kind enough to write in and let us know. There are plenty of Zip drivers and utilities on Aminet, but I'm not sure if they're PowerPC friendly or not. I'm sure someone will have the same combination of hardware as you that's working, though.

More bad news: if you're having problems with games on your PowerPC system then I'm afraid that's the price you have to pay for expanding your Amiga with such state-of-the-art hardware. The PowerPC card just didn't exist when Worms *appeared and so there are bound to be incompatibility problems like this. The best you can hope for is to experiment with various degrading utilities and switch off as much of the PowerPC card as possible while playing troublesome games. Sorry!*

NOISY AMIGA FAN

I have an A1200, Apollo '040, 16Mb RAM, 2.1Gb HD, 20x CD-ROM, a Zip drive and a Canon BJC-250. Half of this is bundled in a PC tower until my next purchase of an Amiga tower. There are, however, a number of problems that my computer has.

1 The fan on my accelerator board is rather noisy. Is there another make I can buy that would do the job while being a lot quieter and possibly smaller, so as to fit better in the machine? It's hard up against the internal disk drive at the moment.

2 I have quite a few programs that constantly crash or hang the computer. *UFO: Enemy Unknown* is one such game, though this was always crashing PCs when it first came out. Has anyone provided a hack to correct this error? After about four resets *UFO* usually works fine with no more crashes. There are other games such as *Cannon Fodder* that continually crash and I was wondering if it could have anything to do with the memory I have installed.

I don't remember what type of memory it is but each chip has the following on it: Siemens HYB5117400BJ-60 Germany 9751 or 9752. If I change the memory, will this help?

Continued overleaf ➡

3 I would like to be able to use my CD-ROM to make a compilation of songs for my personal use, but none of the CD players that have been provided on the cover CDs let you record songs.

I've noticed that a lot of the proper music programs (not just the CD player) will read CD0 if an *AFCD* disk is in the drive but when a CDDA (music disc) is in the drive it doesn't register with the programs. Is there a program that would convert them for me?

4 I bought *Wordworth 7* a while back and while scanning Digita's web page I came across update 7.1. As I only have the net at college on Macs, I downloaded it onto disk and brought it home. That all worked fine until I tried to run the update install program and it flashed up 'the original installation has been changed – please re-install and try again'. Does this mean I have to install the whole program again or can I just re-install the assigns to the *Wordworth* CD (in user-startup) that they expect to be in the CD drive every time you use the program?

5 Finally, about a month ago I bought an IBM 15" monitor and a scandoubler with flicker fixer. Once installed, I found that when windows were moved onscreen it created all kinds of lines, dots and shadows. I played around and found that the main cause of this was that I had both the NTSC and PAL drivers in my DosDrivers drawer.

After taking out NTSC it still makes these irritating lines and dots on occasion but not nearly so much, leading me to believe that when the new OS comes out, the monitor drivers need to have been completely overhauled or, better still, rewritten. In the meantime, is there another solution?

Sam Byford
Benfleet

1 Sourcing a fan would be tricky as most fans are for Pentium class processors and are therefore huge. A company like Eyetech might be able to help, but sadly computers seem to be getting noisier all the time as processors run hotter. More exotic fans are available which work in entirely different ways (Peltier effect cooling pumps, for example) but not only are they expensive, but they probably wouldn't fit into the case.

Perhaps you should try to hold on until you can house everything in a larger case and use a good quality, ball-bearing PC fan.

2 Crashes could be down to the memory if it wasn't up to running at the speed of the 68040 processor. That said, it's rated at 60ns so it certainly shouldn't be a problem. You can quickly test it by removing it.

Other reasons for crashes are a lack of power (I certainly hope you aren't running all that kit from your existing PSU) or simple incompatibilities between the software and the 68040. Try using software-based degraders and searching the Aminet for patches as UFO *crops up frequently and there are various editors and cheats out there.*

3 Where do you plan on storing your song collections? If you're thinking of using your hard drive, remember that it will only take a few albums before it's stuffed. From your question I think that you don't want a CD player utility as such, you need a program which will read the audio data from the drive and convert it to an IFF file. There are a few around on Aminet. Try downloading some and trying them out. Once you get this working, investigate MP3. This is an audio format which can crunch down music files to up to a thirtieth of their original size, ideal if you're storing files on your hard drive. Of course, it's more fun to create your own audio CDs, but to do this you'll need to buy a CD writer and suitable software.

4 Looks like you'll have to re-install the entire program again. Contact Digita for more details on how to install the patch.

5 Amiga video drivers are a black art and I'm not ashamed to say I still don't know exactly how they work, what they do and how having particular ones present in certain directories can make such a difference. As you're trying to force the Amiga to use PC-style video frequencies, try copying the VGAOnly monitor file into your collection to see if that makes a difference.

Hey, hold on: what are they doing in your DOSDrivers drawer? That's not the right place for them! You're right about one thing: the next generation Amigas will have a totally redesigned video interface, that's for sure.

Workbench

10 things to do when:

You want to program your Amiga

1 Keep a look out for *Blitz Basic*. Although it's no longer supported, no other language has the same balance between ease of use and high speed support of the Amiga hardware.

2 Don't forget ARexx. Every post-Workbench 2 Amiga comes with ARexx, which is a powerful scripting language. It's ideal for creating batch scripts for processing a large number of files, for example.

3 ARexx can also be expanded with various add-on libraries so you can use it to create (simple) Amiga applications.

4 Finally, ARexx is also great for adding features to existing applications. For example, if your word processor or graphics program has an ARexx port, you can write scripts to perform new operations.

5 Before the web and HTML came along, the Amiga had several hypertext development systems of its own. If you see *Hyperbook* or *CanDo!* in a car boot sale, they're well worth spending a few quid on.

6 *Assembler* is the way to go for low level programming and when speed is important – for games, in other words. HiSoft's *Devpac* is the definitive tool, but don't expect to master 68K machine code overnight.

7 When you need a good, fast language, second only to *Assembler*, *C* is for you. The Amiga's operating system is designed to be programmed using *C*.

8 *C* has been superseded by *C++* as the language of choice for projects in the professional programming world. Sadly, the main reason for using *C++*, using it's classes to describe something complicated, such as the OS, never really happened on the Amiga.

9 Even AmigaDOS can be used to develop programs, although they would be better described as "scripts". A text file full of AmigaDOS commands can be a useful way to quickly process files when ARexx would be overkill.

10 Look to the public domain. Languages such as *GNU C* are practically industrial strength and yet they won't cost you a penny.





Try the net for *UFO* patches (far left) and if you're into audio, a CD writer is a good buy (left).

CD SOUND

I have recently bought a few things to allow me to expand my system. At

present, it consists of an A1200 which has been rehoused in a nice Power Tower case, a 3.5Gb hard disk, a 6x CD-ROM drive and a Hewlett Packard deskjet 400 printer.

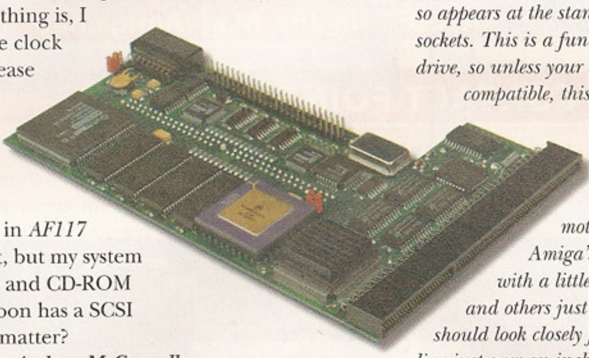
I haven't been able to afford an expansion card yet but I hope to be buying a Typhoon '030 accelerator in the near future.

1 Is there a cable which will allow me to listen to CDs on my CD-ROM without having a sound card?

2 I've heard a lot about clock port expansions. The thing is, I don't know where the clock port is. Could you please help, as this will help me when making future expansions.

3 I read your review on the Typhoon accelerator in *AF117* and it sounds perfect, but my system has an IDE hard disk and CD-ROM drive while the Typhoon has a SCSI controller. Does this matter?

Andrew McGonnell



The Typhoon is excellent value for money. If you don't have an accelerator, this is the one to go for.

__1__ The CD-ROM drive will output the sound from audio disks via a small four-way connector. This is a standard audio signal, which on a PC is mixed with the PC's own sound generating hardware before getting to the speakers. The Amiga doesn't have this mixing capability and so you'll need to take the signal and provide some mixing hardware yourself. Small mixers are available for a few quid and you can combine the CD output from the Amiga and then pass it into your speakers or TV as usual.

There is an alternative: some CD drives can output the audio information over the bus as raw digital data. This can be controlled by a program running on the Amiga and then re-assembled to be replayed using the standard Amiga sound chips and so appears at the standard Amiga phono sockets. This is a function of the CD-ROM drive, so unless your drive is CD-DA compatible, this won't work.

__2__ Some A1200s have a set of pins roughly in the middle of their motherboards. Some Amiga's have them covered up with a little piece of tin shielding and others just don't have them. You should look closely for a pair of pins in a line just over an inch long.

__3__ It doesn't matter – you just won't be able to make use of the Typhoon's SCSI ports, that's all. You can continue to use your IDE hard drive and CD-ROM as normal. Perhaps later on you can add more SCSI hardware, but it's by no means essential.

HELP MY DADDY!

My daddy has got a computer which he cannot work properly. Please can you help him as he is unhappy and moans about it all the time when I am watching *Barney*. His computer is a 1260T with 16Mb of RAM which he uses with a Yamaha MU10 tone generator.

1 Why doesn't *Music-X* send the XG Sysex he writes into it? He says he has got a good music system but this messes it up.

2 *XG Tool* on your January CD always crashes while it is opening at the creating objects stage. *SnoopDos* says it cannot find *lamp.mcc* but he doesn't know what this is.

3 He uses *Music-X* and *Sample-X* which he says are brilliant, apart from the Sysex problem. Is there any chance of a new MIDI/audio sequencer for the Amiga?

Maybe, like with *Doom*, someone could do *Cakewalk* or similar across from the PC. Please can you help me so maybe I can watch *Barney* in peace again?

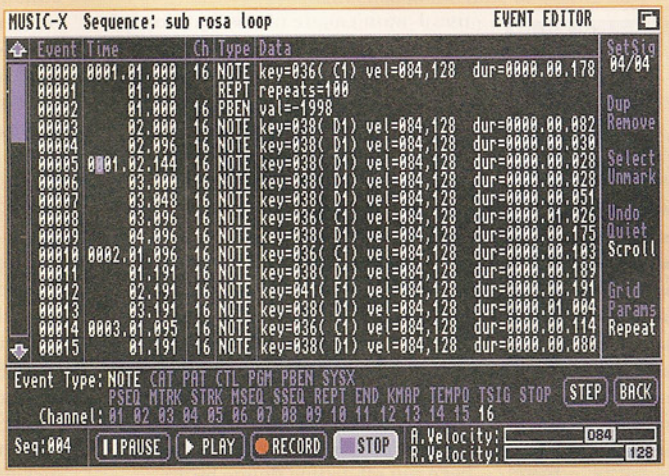
Daniel, aged 6 and a half
Dartmouth

1 Daniel, you're very good to your Daddy to take the trouble to write. You should tell him that* Music-X *never really handled Sysex information very well. I always found it better to use a dedicated Amiga utility for sending Sysex dumps at the beginning of a music session and for storing synth patches to disk. Aminet has several, including* SysExpert *and* Syx*.

Your Daddy should also track down* Bars and Pipes*, which is a powerful Amiga MIDI sequencer with lots of tools and plug-ins available, including* BigSys *for looking after the system-exclusive messages which wind him up so much.

2* Lamp.mcc *is an add-on for the MUI graphical user interface system that's required by many programs. The file you're looking for is MCC_LAMP and if it's not on the coverdisk it can be downloaded from Aminet.

3 There are several Amiga music programs around, but sadly nothing major is in the works. As timing is critical in a sequencing program, the different packages are more or less completely tied to a particular hardware platform. Unfortunately, a port of a PC or Mac program just wouldn't be reliable enough.



Music-X isn't particularly good at handling Sysex information, so it might be better to get a dedicated Amiga utility for these tasks.

IF YOU HAVE A QUERY...

At *Amiga Format* we aim to answer as many questions as possible. Unlike some magazines, we don't just concentrate on our areas of expertise – we take on all your problems (as long as an Amiga is involved).



John Kennedy.

Also:

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○ A1000 ○ A1200 ○ A1500
○ A2000 ○ A3000 ○ A4000

Kickstart version

○ 1.2 ○ 1.3 ○ 2.x ○ 3.x

Hard Disk: .... **Mb**

Manufacturer: ....

Extra RAM fitted – type, size, (Mb) and manufacturer:

....

....

Details of other hardware:

....



Amiga.net

AFCD37:-In_the_Mag-/Amiga.net

ON THIS MONTH'S CD

Dave Cusick looks at the growing number of free ISPs.

CONTACT POINT

I can be reached with comments, suggestions and feedback at dave@dcus.demon.co.uk, or via my website at http://www.dcus.demon.co.uk/.

A few issues ago, the Amiga.net column focused on Freeserve, the free Internet Service Provider established by Dixons. As you'll be aware by now, a couple of errors crept into that article. Sorry about those – I blame the pressure of pre-Christmas deadlines, or something.

Inevitably, when the issue in question hit the shops I was deluged with emails from readers who had discovered that the telephone number 0845 076 6699 doesn't belong to Freeserve and the server https://signup.freeserve.com doesn't actually exist. (The telephone number is 0845 079 6699, and the server is https://signup.freeserve.net, for those who didn't spot the not quite entirely deliberate errors…).

Some interesting things came out of those emails, however. The first is that you apparently need to have cookies turned on in your browser in order to create a Freeserve account. Stephan Reed emailed me to say that he hadn't had a great deal of success signing up until he realised that his having turned cookies off might be the cause of his troubles.

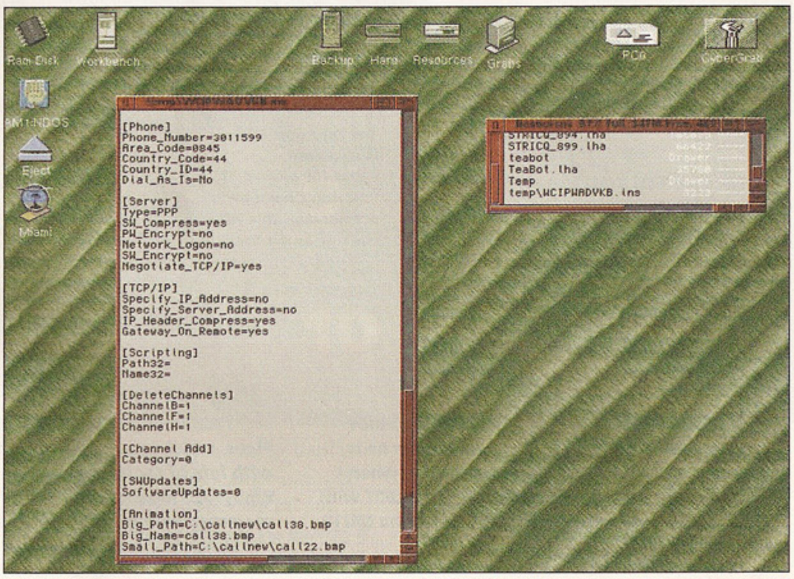
Secondly, *YAM* doesn't seem to like Freeserve. Not being a regular *YAM* user I wasn't aware of this, but clearly a great many of you use this excellent little program as your main email client. Judging from your emails, sending messages isn't a problem but receiving them is. *YAM* doesn't seem to want to download messages and instead produces an error message.

One thing which came through loud and clear is that a growing number of you are turning to free ISPs. Some of you are impressed enough with what you have seen of the free services to wonder whether it's really worth your while paying your current ISP lots of money to provide essentially the same service. Meanwhile, for those who've been put off getting online by the thought of paying up to £15 a month for dial-up access, Freeserve and the other free ISPs clearly offer an excuse to finally take the plunge.

What's that, I hear you say? Other free ISPs? Oh yes. Freeserve wasn't the first and it's already been followed by a load more. An ever increasing number of ISPs are following the Freeserve financial model and offering their customers free access, drawing their revenue from a tiny cut of the call charge each time a customer dials the 0845 access number.

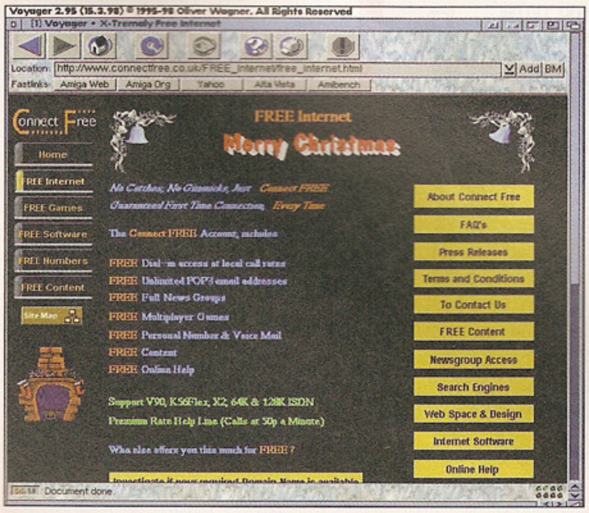
For this sort of business model to be successful, of course, the companies concerned need to build up a vast subscriber base. Freeserve certainly don't seem to have had any problems recruiting customers – within around three months of launching they had around half a million accounts, making them the largest ISP in the UK.

The question remains, of course, whether many of the people who opened accounts will actually use them. I suspect some will make use of the free email addresses and web space while sticking to their tried and trusted traditional ISP, while others may start chopping and changing between



CallNet send you a windows Wizard file when you register. Extract the relevant details out of that, if you can.

> One thing which came through loud and clear is that a growing number of you are turning to free ISPs.



ConnectFree apparently works very well on the Amiga.



Telinco: signing up is easy, but *Genesis* can't find their DNS servers.

multiple ISPs, whether they're free or traditional in nature.

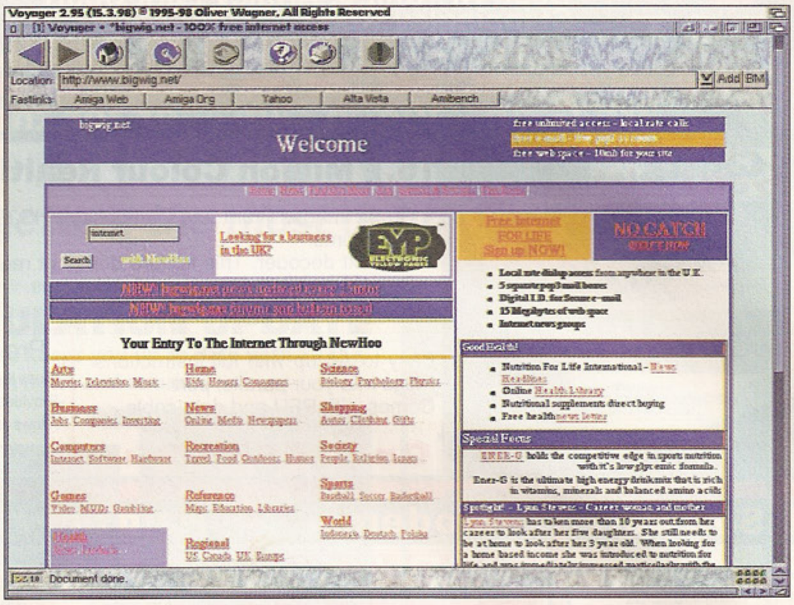
I suspect the majority of the half a million subscribers will have opened accounts just to see how they performed, but will stick to their usual ISP in the knowledge that traditional providers will almost certainly start offering incentives to their members.

So what about Freeserve's competitors? Well, as Nick Clover pointed out to me in an email, Free-Online offer a fairly similar deal to Freeserve, including unlimited web space and five POP3 email accounts with unlimited addresses.

Free-Online have an online signup area too. You'll need a Javascript-enabled browser to sign up, but *AWeb 3* is perfectly suitable in this respect. If you don't own *AWeb*, you could always download the demonstration version to set up an account.

Behind the scenes, Free-Online are actually connected to traditional ISP Force 9 so, as with Freeserve, they should have the financial clout behind them to ensure that they stick around for some time. However, I'm informed by Andy Sillwood that Free-Online don't accept email from Hotmail accounts, so if you've got friends who use Hotmail then signing up with them might not be an ideal solution.

Incidentally, Andy has written his own instructions on signing up with Freeserve using both *Miami* and *Genesis*, and they can be found at:



BigWig causes the same problems for *Genesis* as Telinco.

http://www.sills.freeserve.co.uk/amiga/. If you're one of the many who emailed me asking for instructions on configuring *Genesis* to work with Freeserve, you'd do well to visit the site.

Andy was also one of many readers who sent URLs of other companies providing free Net access, so below you will find a brief guide to some of these other services. Bear in mind that not all free services seem to work with Amiga software and many of the others are targeted at relatively experienced net users. If you're a bit uncertain about what you're doing, it might be better to give a more traditional ISP a try first.

> "Free-Online offer a fairly similar deal to Freeserve, including unlimited web space and five POP3 email accounts…"

FREE4ALL

http://www.free4all.co.uk/

Unlimited free POP3 accounts, 10Mb web space, quarterly CD. Haven't fully launched at the time of writing but service due to commence early in 1999. They promise to provide Amiga support and software on a quarterly CD.

FREENET

http://www.freenet.co.uk/

Unlimited POP3 email addresses, 10Mb web space. Unfortunately, their hideous site uses Java heavily and they're not accepting new accounts at the moment, so they're untested as yet.

BIGWIG

http://www.bigwig.net/

Five POP3 mailboxes, 15Mb web space. The signup procedure is fairly straightforward but Andy Sillwood reports that *Genesis* can't find BigWig's DNS servers, making this ISP a bit of a no-go on the Amiga.

CONNECTFREE

http://www.connectfree.co.uk/

Unlimited POP3 mailboxes, unlimited web space promised soon. I've heard several reports that ConnectFree works well on the Amiga and, as with Free-Online, they don't ask for a wealth of information about you before they let you sign up.

CALLNETUK

http://www.callnetuk.com/

Free POP3 mailbox, 10Mb web space. Although *Voyager* makes a bit of a mess of their main screen, the registration screens work perfectly well. When you register you'll be sent a Windows wizard file, but if you view this in *Multiview* it's possible to extract all the relevant details to enter into your access software.

Strangely though, Andy reports that *Thor* doesn't like their mail server (though *YAM* has no problems with it) – attempts to access webmail services resulted in Connection Denied messages.

TELINCO

http://www.telinco.co.uk/

Unlimited email addresses, 5Mb web space. Signing up is easy but *Genesis* has the same problems as with BigWig, so again this ISP seems to be of no use to Amiga users.

X-STREAM

http://www.x-stream.com

One free email address, 5Mb web space. As yet, I haven't had enough time to test this one out, so if anyone out there is feeling adventurous…

I'd be extremely interested to hear your experiences in using any or all of the above ISPs on the Amiga. Email me at dave@dcus.demon.co.uk, and I'll compile the results on a Free Amiga ISP page at http://www.dcus.demon.co.uk/amiga/freeisps.html. If you don't yet have an Internet connection, get yourself online with the Freeserve tutorial from issue 119 and take a look.

Freeserve: it works well so long as you're not a huge *YAM* fan.



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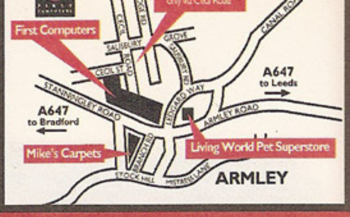
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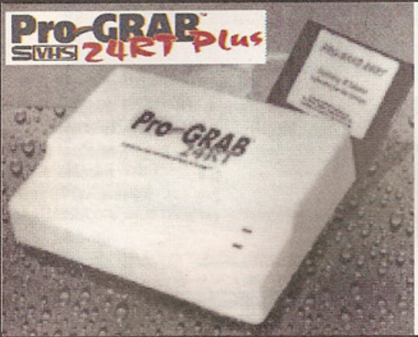
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Sound Library CD	£18.00
Speccy '97	£14.99
Speccy 98	£15.00
ST Fax Pro 3.5"	£30.00
Studio 2 Pro. 3.5"	£50.00
System Booster	£18.00
TechnoSound Turbo II Pro	£30.00
Termite TCP (Hi-Soft) 3.5"	£45.00
Turboprint 6 3.5"	£40.00
Ultimate Gloom	£15.00
Universe Of Gifs	£9.99
Upper Disk Tools Release 1.01	£11.00
Utilities Experience V1	£14.00
Vista Pro 3 Lite 3.5"	£5.00
Wordworth 7 3.5"	£40.00
Workbench Add-ons	£14.00
X-OUT	£0.50
Zip/Jazz Tools 3.5"	£17.00
Zoom 2	£19.00

All Software subject to availability

CREATIVE

The indispensable guide to getting the most out of your Amiga

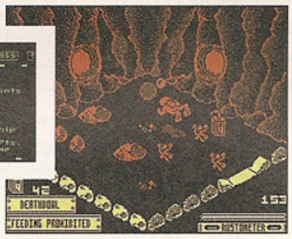


We've got plenty for you to tuck into this month. To start you off, Simon Goodwin has prepared a one-off special on emulators to keep you up to date with the latest releases, including updates for Spectrum and TRS80 emulators. For those of you not rooted in the past, why not spend half an hour in the company of Neil Bothwick, as he shows you how to create tables in HTML with the minimum of fuss.

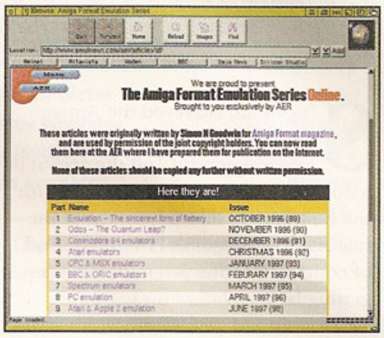
Tony has some suggestions for budget sound equipment and John finally draws his C masterpiece to a close. We'll also have a new programming tutorial in the next issue that looks too good to miss.

Nick Veitch



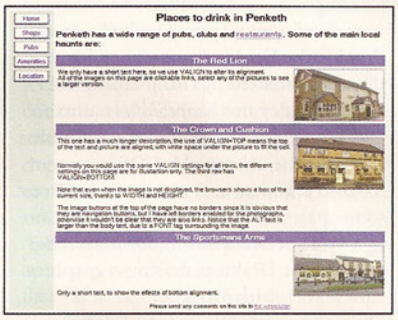


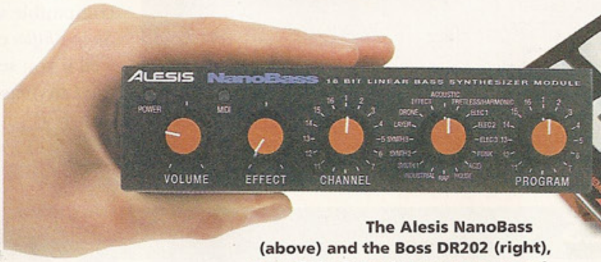
TRS80 emulation (above) and *Hydrofool* on the Spectrum (right).



Name	Email	Telephone
Wirenet	sales@wirenet.co.uk	01925 496482
Amiga Format	amformat@futurenet.co.uk	01225 442244

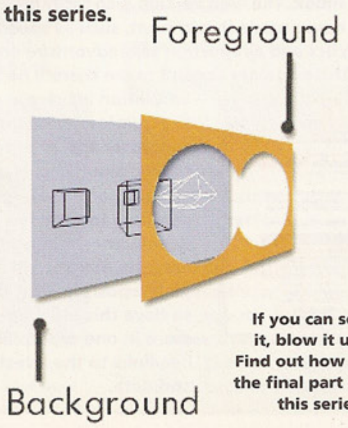
When you want to display large amounts of information, you'll probably find tables are pretty essential.



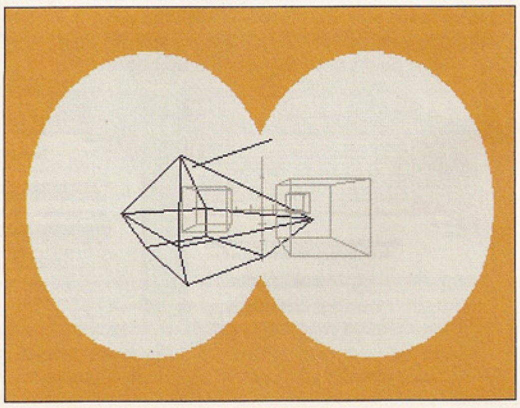




The Alesis NanoBass (above) and the Boss DR202 (right), two of the bargains we recommend.



If you can see it, blow it up. Find out how in the final part of this series.



SEND IT IN!

WE NEED YOUR INPUT.

Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

PROGRAMMING

Is there a language you can't get to grips with? Or maybe you want to know how to do a specific thing in C or ARexx? You might never find the answer unless you write in and tell us about it!

UNDER THE BONNET

Unsure of how how your Amiga really works. Not sure if you are getting the best from your hardware? Write to us.

GRAPHICS

Is there something you desperately want to be able to draw? Drop us a line! Contact us at:

AF Creative • 30 Monmouth Street
Bath • Somerset • BA1 2BW
or email: amformat@futurenet.co.uk
putting "Creative" in the subject line.

Emulation Update

Simon Goodwin updates his epic emulation columns with news of the latest emulators.

ON THIS MONTH'S CD

AFCD37:-Seriously_Amiga-/Emulation

Since I last surveyed the Amiga emulation scene, we've seen major upgrades and the arrival of a dozen C-coded emulators, ported for the first time to take advantage of the raw MIPS of phase 5's PowerPCs. And, of course, the console emulators keep getting better…

SHAPESHIFTER 3.10

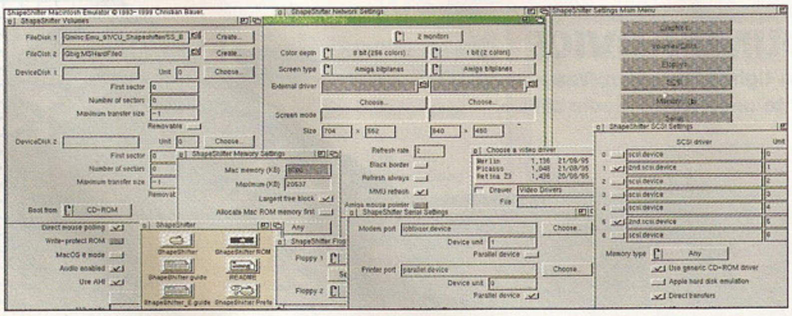
Christian Bauer has released a new version of *ShapeShifter*. The bad news is that it's the final version – after legal threats, Christian has no plans for a PPC release under the *ShapeShifter* name.

The good news is that the upgrade supports the current Mac OS in system 8.0 and 8.1 incarnations, given 10Mb or so to spare, and High Colour operation in a Workbench window, for a 32,768-colour Mac Desktop sharing a graphics card screen with Workbench. Best of all, Shareware restrictions have been removed so you don't need a key file to access CD-ROMs and other SCSI peripherals, or fast hard disk partitions.

The new *ShapeShifter* is on *AFCD37*. *Amiga Fusion* has stalled at version 3.1, but the PPC version is expected in March. *Fusion*'s unique benefits are support for virtual memory and Apple's latest OS 8.2, optimised built-in AGA drivers, superior integration of Amiga and Mac partitions and extra control over 68060 processor options.

> "The good news is that the upgrade supports the current Mac OS in system 8.0 and 8.1 incarnations, given 10Mb or so."

Further investigation of Apple's *DiskCopy* reveals that both emulators support it with a slow internal HD floppy drive, but *Fusion 3.1* doesn't implement CatWeasel floppies in a hardware-compatible way. *ShapeShifter* copes well if you select the CatWeasel floppy as your boot drive, which is a great advantage when setting up your first Mac partition from a pile of Mac disks.



ShapeShifter's configuration windows demand a big Workbench.

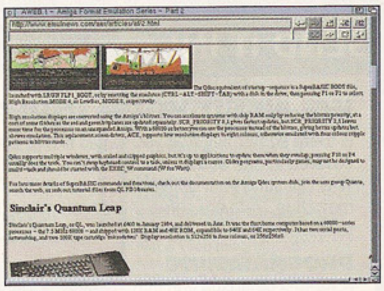
SPECTRUM 128

Last year I bemoaned the lack of 128K ZX Spectrum emulators, and now two new releases address this challenge. The complexities of 8-bit RAM expansion are such that it's been easier to develop new emulators than to un-optimise the 48K ones to suit.

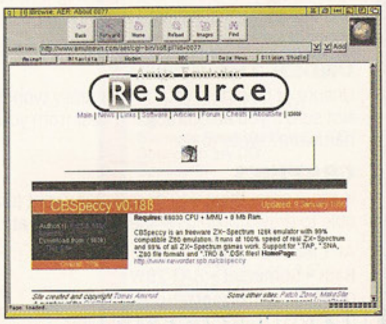
The challenge is the bank switching of pages into the 64K address space of the Z80 processor. This shuffling of memory chunks is a big overhead for emulations, which must juggle 16K areas fast enough to emulate Sinclair hardware which did the same job in a couple of microseconds.

There are two ways to do this. Brute force, copying blocks around, works on all systems but hammers performance on programs like *128K BASIC*, which page memory many times per second. The alternative is 'illegal' cleverness, using the MMU, snatching speed comparable to the real thing on systems that match the developers'.

Spectrum128 hails from Spain and favours brute force. It's stable but slow,



All pages are compatible with the simple but reliable *AWeb 1*.



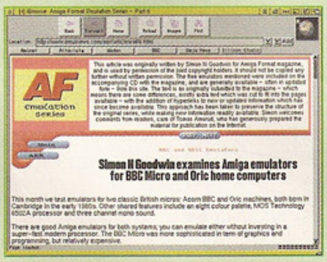
Amiga Emulation Resource is a vital store of emulator information on the web.

EMULATION PAGES

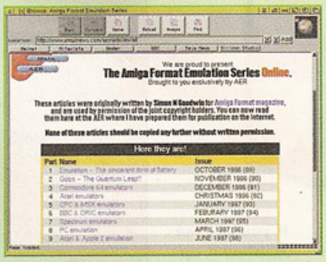
***AF*'s Emulation series now has its own web pages! *AF*'s own site is being revamped, so the *AF* Emulation archive is hosted on Tomas Amsrud's site, with kind permission from Nick and Ben. Examples from the site adorn this article and we've made sure that it works with the most common versions of *AWeb*, *IBrowse* and *Voyager*.**

These pages hold the original text of my *Amiga Format* series, converted from *Final Copy* to HTML format. The graphics are fewer and simpler than the printed version, but tables, sections and example screens remain, plus extended links and a new index. The web version also includes snippets that never made it into print, such as speed statistics and a report on text adventure engines.

This certainly doesn't mean there'll be fewer emulation articles in *AF*. As the quintessential home computer and an excellent mimic, emulation is a great strength of the Amiga and I'll continue to note the latest developments in print, at least six months ahead of the web repository. But it's great to have this information store in one cyberplace, with live links to the latest code and data.



A new home on the web for *AF*'s classic retro reviews.



Browse through past reports at your leisure.

even on a 68060. Some games work fine but anything sluggish on a real Spectrum will grind on this emulator, and on an '030 it's like watching paint dry.

So far, only half of the Z80 engine is coded in *Assembler*, with the rest in *Blitz BASIC*. Tapes, joysticks and sound are ignored, and some types of .Z80 snapshot are rejected. Keyboard handling is rudimentary and some snaps crash the emulation, though not the Amiga, but it shows promise for a version 0.1 beta.


The *AF* emulation pages remember the Atari 800.

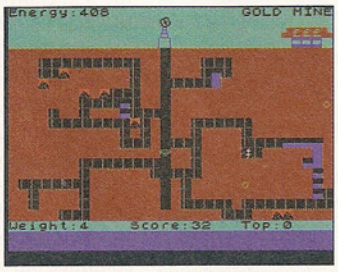
CBSPECCY

CBSpeccy comes from two enthusiasts in Russia and version 0.18 beta is rather impressive if you've got the hardware to run it. It was written on an expanded A1200 and requires a 68030 with a Memory Management Unit, but it wouldn't run on my A3000.

CBSpeccy is actually modelled on a Pentagon128, one of the better Russian Spectrum clones. It also emulates the simple TR-DOS interface, with magic button snapshot hardware, as well as Kempston, Sinclair and Protek joystick ports. It loads TAP cassette files, SNA and Z80 snapshots, mimicking real Spectrum refresh and display timings as closely as anything yet on the Amiga.

Key mapping is configurable through a text file and 128K sound is present, though imperfect.

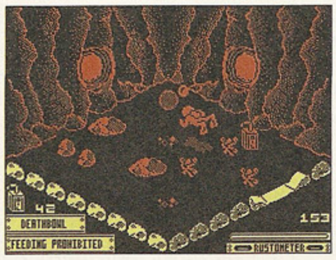
Thomas 'Thor' Richter is developing an MMU library which should make bank switching much easier, providing a consistent API so programmers needn't worry about the differences between MMUs. The 68040 and 68060 are close cousins, while the 68030 MMU is a relatively slow and complicated beast, based on the add-on 68851 chip used in venerable 68020 systems like the A2500.



Spectrum *Gold Mine*, or that's what Simon reckoned...

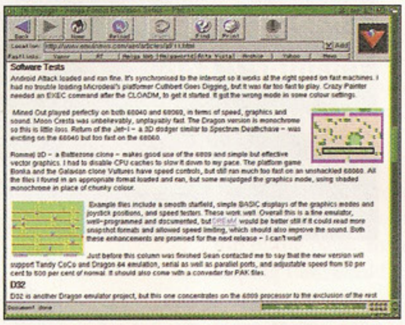
PPC EMULATORS

PowerPCs encourage emulation developments, with both PowerUp and WarpUp collecting new adherents. There's still no sign of a PC or Mac emulator that uses the PPC, but Quasar and Microcode Solutions are working on code to fill this gap. Meanwhile, there's no shortage of other PPC-specific emulators, as you can see from the table.



Hydrofool on the Spectrum, and now on the Amiga.

Future PPC boards will attempt to run without a 68K at all, using a software emulator to run CISC code on the RISC processor.


Voyage back to times when there were Dragons!

Apple tried this on early PowerMacs, leading to the embarrassment of new machines that ran noticeably slower than the 68040s which they were meant to supersede, but the PPC has come a long way since then.

It will be interesting to see how the emulation compares with the state of the art in real 68K hardware. My guess is that a 68060 will still be the fastest way to run genuine 68K code, but '030s and '040s could find themselves eclipsed in many Classic Amiga applications.

PPC Emulation Software for the Amiga

PROGRAM	SYSTEM EMULATED	KERNEL
Atarippc	Atari XL emulator	WarpUp
V2600	Atari V2600 game console	WarpUp
Frodoppc	Commodore 64 emulator	WarpUp
MAMEppc	Multiple Arcade Machines	PowerUp
MasterGearppc	Sega Console emulator	PowerUp
MESSppc	Multiple Console emulator	PowerUp
SNES9x	Super Nintendo emulator	PowerUp
TrueReality	Nintendo 64 emulator	PowerUp
UAE	Amiga emulator, PPC port	PowerUp
VGBppc	Virtual GameBoy emulator	PowerUp
VGBwos	Nintendo GameBoy emulator	WarpUp
VMac	Mac Classic (68000)	PowerUp
WarpSNES	Super Nintendo emulator	WarpUp

TRS80 REVISITED

Red Skull's *TRS80 Model 1* emulator is more fun and easier to use now, thanks to speed regulation, controlled by pressing F1 and F2 to speed up or slow down, plus authentically raspy sound.



TRS80 – not just 3/4K of graphics, but 1-bit sound as well!

The improved TRS80 emulator appears for the first time on *AFCD37*.

There was no built-in sound hardware in the TRS80, but most games used a single-bit output to generate beeps, buzzes and almost intelligible speech. That was a great improvement over the hardware-threatening technique of rattling the cassette motor control relay, leading to welded contacts and a sojourn in Tandy's repair department. There are no plans to emulate this as there's no convenient relay inside an Amiga, though a sampled 'bzzzt-clack' could be played at appropriate moments.

Leslie Ayling is using his time more fruitfully by adding code to emulate the Tandy floppy disk controller. This low-level hardware emulation will bring a host of early DOSes to the Amiga, from Randy Reed's original TRSDOS to the device independent LDOS.

This will use disk image files at first, but support is planned for original 5.25" disks, with 35 tracks and upwards, in single and double density, given an appropriate drive. I've got an ice cream box full of floppies trying not to melt at the thought of this.

NEXT MONTH

A new, ground-breaking *Amiga Format* tutorial starts next month. If you want to know what's uniquely special about Classic Amigas, you can't afford to miss my next series which will take *AF* into the next millennium...

WEB ADDRESSES

AF Emu: http://www.emulnews.com/aer/articles/af/
Apple OS 8: http://www.apple.com
CBSpeccy: http://www.neworder.spb.ru/cbspeccy
Emulator Central: http://www.classicgaming.com/aec/
ShapeShifter: http://www.Uni-Mainz.DE/~bauec002
Spectrum128: http://www.geocities.com/siliconvalley/horizon/1241
TRS80 files: http://www.kjsl.com/trs80

Usenet's comp.sys.amiga.emulations **remains a good source of information and advice about emulators that run on the Amiga, only spoilt by PC-losers with *UAE* who keep popping up to ask people to mail them the copyright Kickstart ROM image. The correct place for enquiries about *UAE* is** comp.emulators.misc**. The only legal source of Kickstart ROM images is Cloanto, publishers of *Amiga Forever*.**

Using HTML

Neil Bothwick puts some formatting ideas on the table.

Don't turn the page! Tables may sound like something used to display boring columns of figures and statistics, but the <TABLE> tag is just about the most powerful page layout tool in HTML. Up to now we've seen that most of the formatting of an HTML document is governed by the browser. The user's choice of screen mode, font styles and sizes dictates where text wraps and flows, but we have only had limited control through paragraph and line breaks.

While this is the way HTML was intended to work from the start, there are ways to control the layout of your page, to impose your own style on it while remaining within the constraints of individual browser configurations.

A table is effectively a grid, a set of boxes arranged in rows and columns, each of which can contain the majority of HTML elements. Here's a simple example:

Contents

If you've missed any tutorials in this series, call our back issue hotline on 01458 271102.

```
<TABLE>
<TR><TH>Name<TH>Email<TH>Telephone
<TR><TD>Wirenet<TD>sales@wirenet.co.uk<TD>01925 496482
<TR><TD>Amiga Format<TD>amformat@futurenet.co.uk<TD>01225 442244
</TABLE>
```

The table is enclosed within the <TABLE> </TABLE> tags and the start of each row is defined with <TR>. Each cell of the table is defined with <TD>. The table is made as wide as is needed to include the widest row, but text within cells will be wrapped to ensure the table isn't wider than the browser window. The top row uses <TH> instead of <TD> for each cell. <TH> is for table headers and is identical to <TD>, except that it's generally rendered in a bold type with the text centred in the cell. <TD> uses the normal body font and aligns its contents to the left of the cell by default.

<TR> and <TD> are somewhat unusual in that they don't need corresponding </TR> and </TD> tags. <TD> is assumed closed when the next <TD> or <TR> is found. <TR> is closed at the next <TR> or </TABLE>.

This lets us line things up in columns, but so far it doesn't appear to offer a great deal of layout power. The importance of <TABLE> lies in the attributes available for <TABLE>, <TR> and <TD> that alter the display of the table and its contents.

Since all cells in a column must be the same width, the WIDTH attribute affects the whole column. There can only be one WIDTH setting for a column so any subsequent ones are ignored. Similarly, you may only have one HEIGHT attribute in a row. The browser will override an unacceptable WIDTH setting. For example, setting it wider than the table (or window) will result in

<TABLE> ATTRIBUTES

The attributes that you can use in the <TABLE> tag are as follows:

ALIGN
Left, right or centre. This is how the table should be aligned in the browser window. It doesn't affect the alignment of items within the table cells and the default is left aligned.

WIDTH
The width of the table, either in pixels or as a percentage of the window width. The default is the minimum width needed to include all items without wrapping. It will not exceed 100%. The browser will override the width figure if it is needed to render the table correctly. If the table contains an image wider than the window, the image will be shown in full, even if the tag says <TABLE WIDTH="100%">.

BORDER
The width, in pixels, of the border drawn around the table and its cells. The default value is 0, which means there's no border.

CELLSPACING
The amount of blank space between cells.

CELLPADDING
The amount of space set between the cell contents and the cell border.

BGCOLOR
A background colour for all cells in the table. Usage is the same as for the <BODY> tag.

BACKGROUND
Use BACKGROUND=url to load an image as a background to the table. This is a Netscape extension, not part of the official HTML specification, and so it may appear differently in different browsers.

These set up some of the display attributes of the table, but the actual table contents are handled by the <TR> and <TD> tags.

<TR> accepts the following attributes:

ALIGN
Left, right or centre. This is different to the ALIGN attribute of <TABLE>. In this case it sets how the contents of each cell should be aligned within that particular cell.

VALIGN
Top, middle or bottom. This attribute sets the vertical alignment of cell contents.

BGCOLOR
As for table, but refers to the cells of a single row.

BACKGROUND
Once again, BACKGROUND isn't part of the official HTML specification and may not work as expected on all browsers.

These attributes affect all cells in a row, unless an individual cell has a different setting within its <TD> tag. <TD> accepts all of these attributes and a couple more.

NOWRAP
Disables word wrapping for the text in this cell.

WIDTH
Sets the width of a cell, either in pixels or as a percentage of the table's width.

HEIGHT
Sets the height of a cell, either in pixels or as a percentage of the table's height.

COLSPAN
Makes a cell cover more than one column.

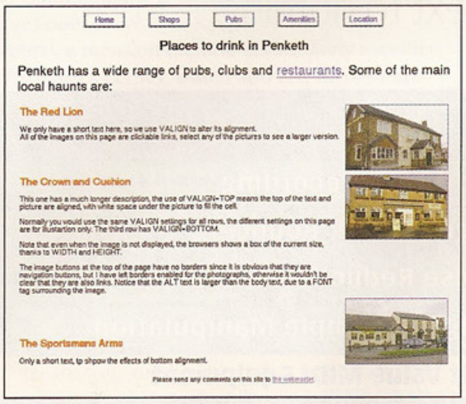
ROWSPAN
Makes a cell cover more than one row.

a cell as wide as will fit. Trying to make the cell narrower than an image will result in the cell being just wide enough to contain the image.

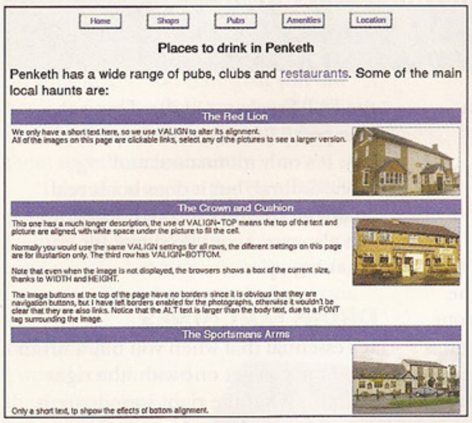
Yes, you can have images as well as text inside a table cell – you can use most HTML items within a cell, including more tables. Let's take another look at one of the pages from

Name	Email	Telephone
Wirenet	sales@wirenet.co.uk	01925 496482
Amiga Format	amformat@futurenet.co.uk	01225 442244

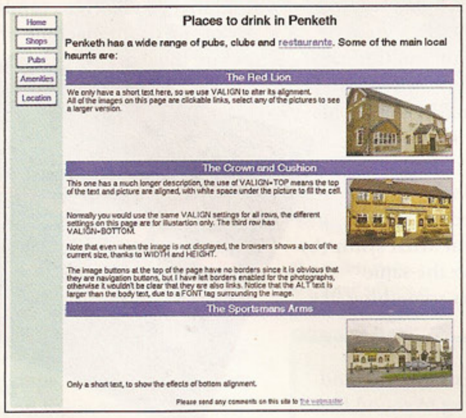
Our first table.



The pubs page, using tables to separate the text and images.



The coloured title bars are table cells that cover the full width of the table.



Tables within tables. The navigation bar and main copy are each in a table cell that contains more tables.

TABLE LOADING

When a browser loads a page of text, it normally begins to display it before it has finished loading. With a table this is difficult because the browser doesn't know how wide to render each column until it has all the table data loaded. With a large page (or slow download) this can mean a significant delay. A solution is to make sure you always give a width for each column, even if it's only using "*", so the browser knows the intended width of each column before the table is loaded. This may occasionally force the browser to redraw the table if it encounters an image wider than the allocated width, but most of the time it will speed up page loading with no unpleasant side effects.

our home town website and see how we can use tables to arrange it differently. The pubs page previously used the ALIGN attributes of <IMG> to mix text and graphics on the page, and this is how it looks with tables.

```
<TABLE WIDTH="100%" CELLSPACING=5>
```

Start the table, make it the full width of the window and leave some space around each cell.

```
<TR VALIGN=TOP><TD><H3><FONT COLOR=RED>The Red Lion</FONT></H3>
Body text..
```

Start the first row, align all cells at the top and put some text in the first cell. Note the use of <FONT> and <H3> in here. You can use most HTML tags within a cell but they cannot spread across cells. To use the same FONT setting for several cells in a row, you would need a separate <FONT>…</FONT> for each one.

```
<TD WIDTH="200"><A HREF="../images/redlion.jpg"><IMG
SRC="../images/redlion.gif" ALT="Red Lion" WIDTH=200 HEIGHT=125></A>
```

The second column contains an image. Since all the images for this column are the same width, we can set the width in <TD> to ensure that the column is exactly the right size.

```
</TABLE>
```

After a few more rows, we close the table.

Another part of this page that's crying out for a table is the row of buttons at the top of the page. Instead of the previous approach of using a fixed spacing and hoping they would fit the user's browser window, we can now use this:

```
<TABLE ALIGN=CENTER WIDTH="75%">
```

Here we make the table narrower than the full window, but if the window isn't wide enough to fit the table in 75% of its width, the browser will use whatever space it needs instead.

```
<TR ALIGN=CENTER>
```

Each image is centred within its cell. When first setting up a table, you may wish to add a BORDER=1 so you can see exactly what's going on, removing it later if you don't want the cell borders displayed.

```
<TD WIDTH="*"><A HREF="home.html"><IMG SRC="../images/home.gif"
ALT="home" WIDTH=80 HEIGHT=30 BORDER=0></A>
```

The * value for WIDTH means an equal share of the available space. In this case we have five buttons so each gets 20%, but if another cell had WIDTH="40%" the cells with * would each get an equal share of the remaining 60%. You can take this a stage further and use 2* to give one cell a double share. We'll see more of this next month with frames.

```
<TD WIDTH="*">...
```

For each of the other buttons.

```
</TABLE>
```

And don't forget to close the <TABLE>.

So far, every cell in a column has been the same width, but what if you want a cell do extend across two columns, or two rows? In figure 3, the coloured title bars are created with:

```
<TR><TD COLSPAN=2 ALIGN=CENTER BGCOLOR=BLUE><FONT SIZE="+2"
COLOR=WHITE><B>The Red Lion</B></FONT> <TR VALIGN=TOP><TD>We only
have...
```

COLSPAN=2 tells the browser to extend this cell across two columns. As this table only has two columns, that makes this cell cover the full width. BGCOLOR gives the coloured background and FONT is used to make the text white.

I said tables were a powerful page layout tool and our final example gives a hint of this. We move the the navigation buttons into a cell on the left of the page, with the rest of the page, including all of its tables, contained in a second cell. It works like this:

```
<TABLE WIDTH="100%">
<TR VALIGN=TOP><TD WIDTH="100" BGCOLOR="LIGHTBLUE"><TABLE
ALIGN=CENTER>
<TR ALIGN=CENTER><TD><A HREF="home.html"><IMG SRC="../images/home.gif"
ALT="home" WIDTH=80 HEIGHT=30 BORDER=0></A>
```

The first cell contains the navigation bar. It has a coloured background to separate it from the rest of the page. The <TD> contains a table with the navigation buttons. Note the use of VALIGN to keep the buttons at the top of the column.

```
<TD BGCOLOR="WHITE"><H2 ALIGN=CENTER>Places to drink in Penketh</H2>
```

The other cell contains the rest of the page.

Sound Advice

Short arms, long pockets... Yes, it's **Tony Horgan**, here to explain how you can get a whole new studio set up for next to nothing.

There's no way I could cover the whole range of studio and MIDI gear that's currently available as there's just too much of it. If you've got enough cash to splash out a couple of grand in one go then you can browse the pages of *AF*'s sister magazines, *Future Music* and *The Mix*, where you'll find plenty of mouth-watering noise boxes with flashing lights. You won't need to spend too carefully and should be able to buy a few things on a whim.

However, most of us don't find ourselves in that position very often, if at all, so what I've done instead is to pick out a few examples of gear that are outstanding because they offer excellent value for money.

You could use this as a guide to setting up a complete MIDI recording studio on a tight budget, but you should also find it just as useful for filling little gaps in an existing set up, without breaking the bank.

> **If you've already got a keyboard and want more synth options, a synth module is normally the best buy.**

In addition to the current models mentioned here, it's also well worth looking out for deals on end of line products which can often get you a brand new, boxed, never used product for half the original price as it's sold to make way for its replacement model. All of the equipment here is compatible with any Amiga running a MIDI sequencer which is connected via a MIDI interface.

Contents

If you've missed any tutorials in this series, call our back issue hotline on 01458 271102.

SYNTH MODULES

If you've already got a keyboard and want more synth options, a synth module is normally the best buy. Think of these as normal synths with all the manual controls removed (apart from editing controls) so that everything has to be done via MIDI. Just about the cheapest available must be the Yamaha MU10 (£115). This is based on the DB50XG daughterboard that formed *CU Amiga*'s Project XG. It's a great General MIDI compliant multitimbral unit with onboard effects, which can be used to process external audio signals too. An MU10 editor is available from Aminet (mus/midi/XGTool.lha).

No-one really needs or wants more than one General MIDI synth (by definition they all have the same sounds), so why not try something like the FAT Freebass (£130). This is the cheapest TB303 Bassline copy you can buy. It's only monoaural and monotimbral, but it does boast real analogue circuitry through which you can also pass an audio signal for fattening up.

DRUM MACHINES

It's essential that when you buy a drum machine you get one with 'the right sounds'. What the right sounds are is entirely up to you, of course, but it's vital that you listen to (and preferably try out) a drum machine before buying.



The Boss DR202 drum machine includes filters.

Never accept a claim on the box about including 'all the TR-808 and 909 sounds'. Most will claim exactly that, but few will deliver in the way you hope. In my own experience, the Novation Drumstation (£350) is the only one to follow through on the promise of authentic 808 and 909 sound emulation. It has eight outputs and sounds fantastic with bass drums that I've never heard matched by anything other than the originals. That's not to say that it's the only alternative to a real 808 or 909 – try as many as you can.

SYNTH KEYBOARDS

This is the first bit of MIDI gear most people will go for. You can expect even home keyboards to come equipped with a variety of sounds which can be played either live or triggered from MIDI. Most also have some drum sounds too. By far the best value starter keyboard around is the Yamaha DJX (£270). It's a home keyboard with pop dance ambitions and it comes with tweakable filter knobs, some built in patterns (which you'll probably never use seriously) and a sampler. It's really only a matter of time before someone makes a hit record using this thing alone.

For something a bit more professional, you could try the Yamaha CS1x (£350) which is basically an MU10 with a proper keyboard and editing controls. While not wanting to sound like an advert for Yamaha, I can't resist recommending the Yamaha AN1x (£500), which is a gorgeous 'virtual analogue' synth, the only downfall of which is its rather limiting ability to play just two of its 128 lovely sounds at once.



The Yamaha DJX is a great value keyboard for you to start off with.

EFFECTS PROCESSORS

No contest here for the prize for the best value multi-effects unit: the Zoom 1201 (£100) walks away with it. It's a stereo in/stereo out rackmount unit which uses 16-bit 44.1KHz digital processing to offer a wide range of reverbs and delays, alongside a vocoder, pitch-shifter, rotary speaker simulator, crunchy lo-fi and filter effects and a karaoke mode which strips out vocal frequencies from a stereo input. Sound quality is good and operation is very simple. Just get one, okay?

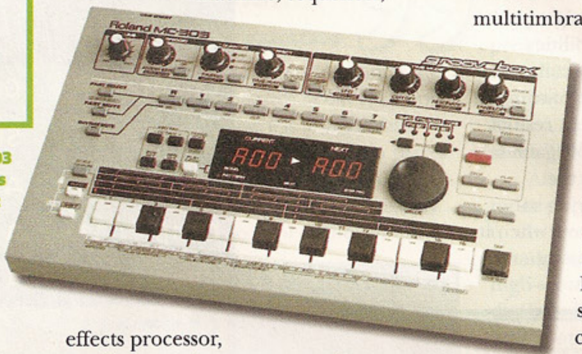
Others worth a mention include the similarly specified Behringer Virtualizer (£150), which also has vocoder and rotary speaker effects and boasts 24-bit processing. Then there's the 20-bit Digitech Studio 100 (£150) which concentrates on the more standard effect types.



The Zoom 1201 – great value, great features, great quality.

Of course, you might not want those sounds, in which case you could get away with a cheaper unit. In that case it's all down to personal preference. Do try to get one with multiple outputs, even if you don't currently have room for them on your mixer. You'll be glad you did because you can then process different sounds with different effects and mix them together more subtly.

I should mention the Boss DR202 (£300) which sports some interesting features, including filters. I haven't yet used one, so I can't personally vouch for its sound. Try it for yourself if you can.



Roland MC303 Groovebox tries to get classic drum sounds and synths in one unit.

MIXERS

I would recommend the Spirit Folio Lite as an excellent value mixer, but it was recently discontinued to make way for the Spirit Folio Notepad (£125). Despite offering a slightly lower all-round spec than the Lite for a similar price, the Notepad does pack a lot into a very attractive little box. You get four mono and two stereo inputs, and the stereo pair both include turntable pre-amps, which could be very handy. Two-band EQ is available on all channels and balanced mic inputs are available for the mono channels. One auxiliary send is included for the inclusion of an effects unit. It would make a good starter mixer but is destined to be outgrown very quickly.



The Spirit Folio Notepad offers a good deal in an attractive box.

If you'd rather look ahead and leave room for future expansion, the Spirit Folio F1 (£250) is an excellent choice. You can have either a 14- or 16-input model, with three-band swept-mid EQ, long faders, three effects loops and insert points. It's a much better long-term buy than the Notepad.

Mackie also do a range of well-featured, low cost mixers which are definitely well worth auditioning.

WORKSTATIONS

Generally, workstation prices are high because they aim to offer everything in one box: multitimbral synth, drum machine, sequencer, effects processor, etc. Even so, there are some cheaper alternatives. The Roland MC-303 Groovebox (£400) has a good stab at integrating a range of classic drum machines and synths into one unit. Its lack of individual outputs will disappoint some, but if that's not a problem it should please budding dance music producers.

In a similar vein, there's the Quasimidi Rave-o-lution 309 (£500) which combines a monophonic bass synth and a multitimbral drum machine. An expansion to add separate assignable outputs is currently being included in that price by Turnkey.

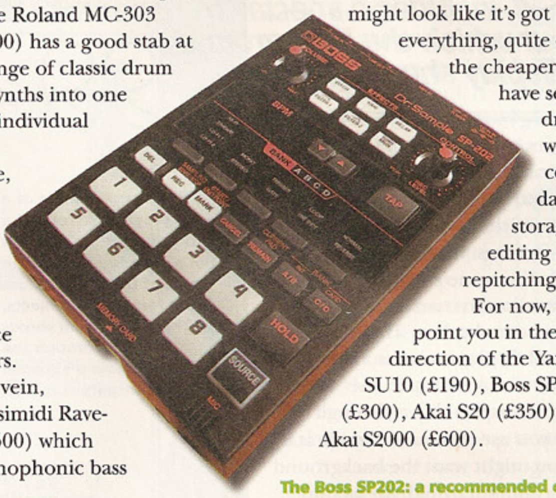
Jargon Explained

MULTITIMBRAL – Able to play a number of different voices simultaneously.
MONOAURAL – Single channel audio (i.e. not stereo).
SWEPT-MID EQ – Control on a mixer which allows precise definition of the frequency band to be affected by the mid EQ cut/boost control.
INSERT POINT – Secondary input and return point on a mixer channel, generally used to pass that channel through a signal processor.

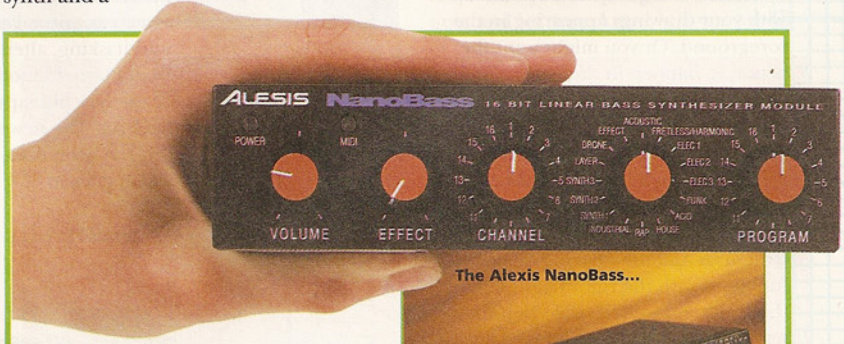
SAMPLERS

I'm planning a major round-up of budget MIDI samplers for a future issue, in which I'll be testing them specifically for Amiga compatibility. While the specified features of a sampler might look like it's got everything, quite often the cheaper ones have serious drawbacks when it comes to data storage, editing and repitching.

For now, I'll just point you in the direction of the Yamaha SU10 (£190), Boss SP202 (£300), Akai S20 (£350) and Akai S2000 (£600). AF



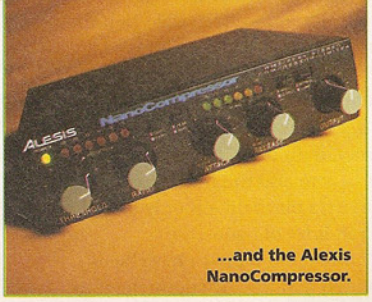
The Boss SP202: a recommended choice.



The Alexis NanoBass...

MISCELLANEOUS

Alesis do a range of cheap music production gizmos, all called Nano-something-or-other. There's the NanoCompressor (£80), NanoVerb (£95), NanoBass (£215) and NanoPiano (£300). For a standalone mastering recorder, MiniDisc units offer virtually perfect results for less than £200.



...and the Alexis NanoCompressor.

PRICING AND AVAILABILITY

Most of the prices quoted here are approximate, based on those advertised by Turnkey at the time of going to press. Turnkey can be contacted on 0171 419 9999.

These products are, of course, available from other dealers and prices may vary.

C for Yourself

In the final tutorial in this series on *C* programming, John Kennedy takes a look at one of the Amiga's wonderful graphics tricks – Dual Playfields…

AFCD37:-In_the_Mag-/C-Course

ON THIS MONTH'S CD

One of the things which has always made the Amiga special is its graphics capabilities. Even the very simplest Amiga came with hardware video features which are capable of producing excellent results. Although the move to solid 3D games like *Quake* has demonstrated the Amiga's weak-spot for displaying so-called chunky graphics displays, when it comes to scrolling and overlaying images, the Amiga is still tops.

> The foreground display includes a special 'transparent' colour which the background display shows through.

This month we're going to round off our look at Amiga programming by updating our program display to make use of one of these special Amiga graphics features: the Dual Playfield display. As the name suggests, this technique allows us to define two separate screen displays. The foreground display includes a special "transparent" colour which the background display shows through.

How you use this screen mode is up to you: you might want the background to be a scrolling starfield, for example, with your drawings appearing in the foreground. Or you might want the action to happen in the background, with the foreground containing an overlay of control panels, scores, radar displays and other information.

Setting up a Dual Playfield display isn't particularly tricky. As usual, it's a matter of defining the necessary data structures and then calling a few functions with the right flags set. Once this is done, Intuition will open the new screen display and the rest is easy.

As with the Double Buffering technique we used last month, we need to get down to the bitmap level of screen definition, but this means that it's easy to add the new bitmap(s) for the extra playfield – it only takes half a dozen lines of code.

Once the bitmaps have been defined and initialised, we need to plumb them into the system. The method for achieving this is to open the screen as normal and then suspend multitasking, alter the screen mode to Dual Playfield mode, insert the address of the new bitmaps and switch the OS back on. The new screen appears once this has been done. Here's the code which does it:

```
// Install Dual Playfield

Forbid();

myscreen->ViewPort.RasInfo->Next=rinfo2;
myscreen->ViewPort.Modes |= DUALPF|PFBA;

Permit();

MakeScreen(myscreen);
RethinkDisplay();
```

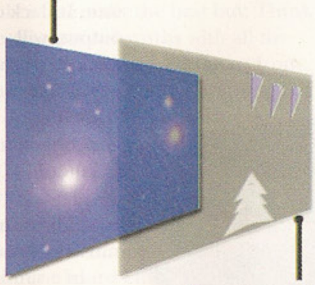
The flag DUALPF switches the video hardware into Dual Playfield mode and the flag PFBA swaps the default priority of Playfield 1 appearing in the foreground so that the new playfield will appear in front. This means that the player can only "see" the action through the holes cut in the foreground, which is a pleasing effect.

We can draw to any playfield at any time as there are two separate RastPort structures which we can access, depending on which we want to draw to. The double buffering process remains unchanged, although in this code we only double-buffer the background bitmaps, not the foreground bitmaps.

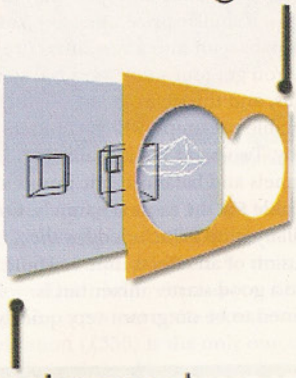
I started out coding some

Contents

Missed a tutorial in this series? Call our back issue hotline on 01458 271102.



Here's an example of a dual playfield screen: the background stars are kept in a completely separate part of the display from the foreground objects. The background shows right through the foregound's special transparent colour.



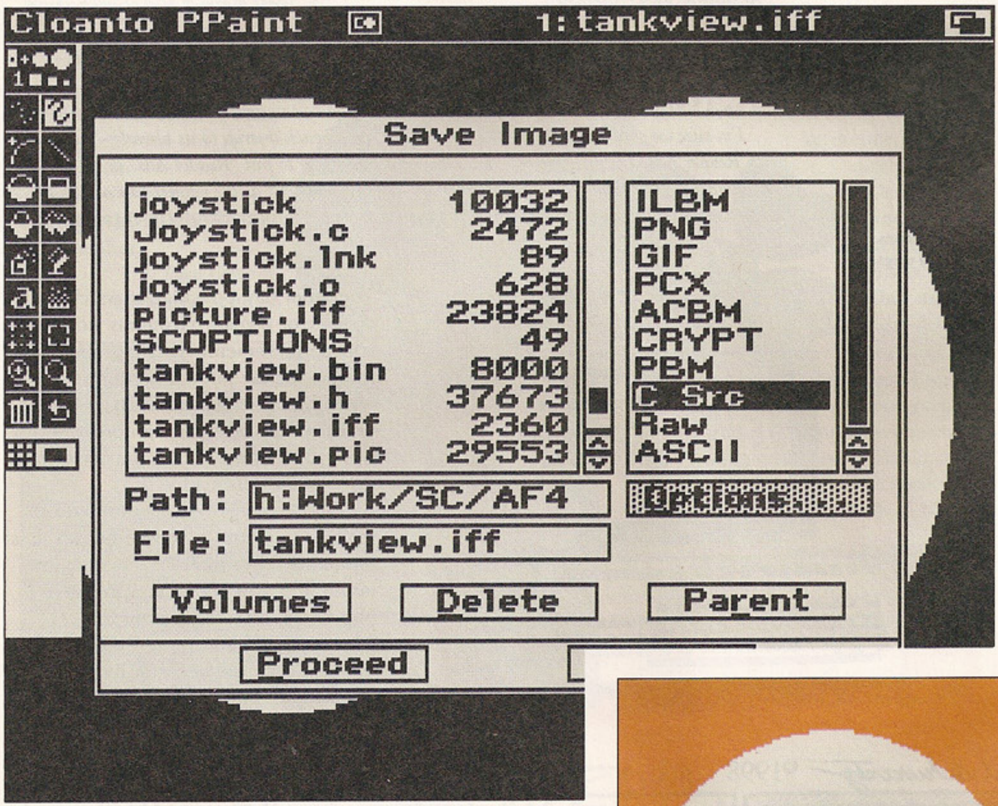
This time the main action happens in the background playfield. The foreground contains a picture of the sights and an eyepiece view, and it also hides the edges of the screen as a bonus. The foreground plane is the ideal location for display scores and so on.

instructions to draw details into the new foreground screen. I flood-filled the entire display and then drew two circles in colour 0 to make holes. However, this was a tortuous business. It would be much better to use a paint program to draw the screen and then incorporate that into the program.

There is an extraordinarily easy and useful way of quickly getting graphics from *Personal Paint* into your *C* code: use the C-Source Save option. This isn't present in all versions of *Personal Paint*, but if you have a version which supports it, you're laughing. Draw your screen display and then save the file as something like "foreground.h". You can then INCLUDE this in your program.

Personal Paint creates a *C* structure of type Image, and to copy this image into your own screen display you only need to use the DrawImage function, like this:

```
DrawImage(rastport,&tankview,0,0);
```



***Personal Paint*'s ability to save out an image as *C* source code can save hours of work.**

If the colour of the image is important to you, you'll need to investigate some palette functions to preserve the colours. The end result is a very easy to define image which appears in front of the wireframe graphics. It's easy to see how such a program could be expanded into something which actually looks pretty decent.

The final image the user sees on-screen is a combination of the foreground control panel and the same 3D wireframe (and flicker-free) images of a tank and objects.

GAME PROGRAMMING

Now you have the graphics sorted you can move on to coding the rest of the game. As you may have detected, our 3D program has slowly evolved into a rather familiar-looking game involving wireframe tanks roaming around an empty landscape. If you want to make the game more challenging than a simple driving test, you have a lot of work in front of you.

> **"Instead of the tank rotating when the player selects left or right, every object in the scene needs to swing around..."**

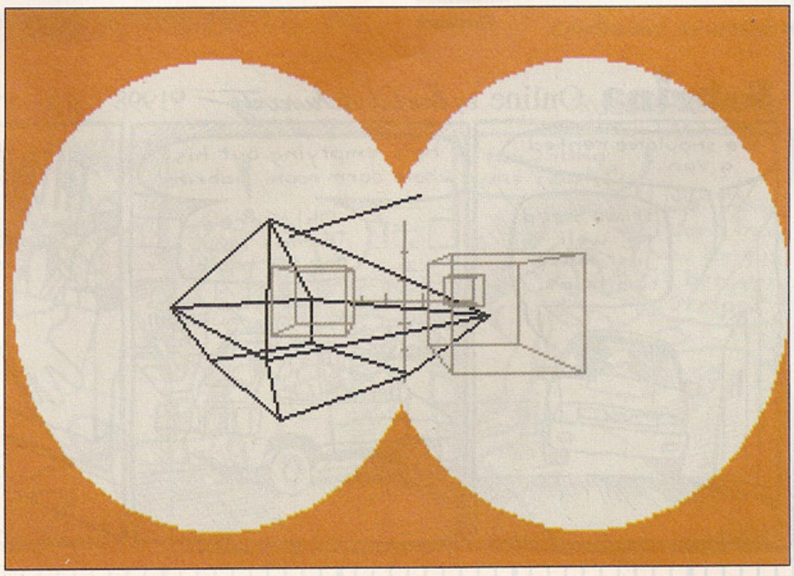
First of all, you need to change the way in which the entire 3D world works. At the moment there is a single tank which is under the control of the player. You need to change this so that the tank you see displayed is actually the enemy tank under the control of the computer. This leads to an entire shift in the way objects work. Instead of the tank rotating when the player selects left or right, every object in the scene needs to swing around, giving the impression that it is the player who is spinning. All the maths for performing this spin is already present in the *C* code so you just need to have a think about how to use it.

Now you should be working out a routine to allow the user (and the enemy tank) to fire a shell. The shell can be a simple cube object, but pretty soon it becomes obvious that some kind of collision-detection logic is required. How can you tell when the shell hits the tank, or when the tank bumps into an object for that matter? I solved the problem by assuming all objects were actually circles and then calculating the radius to make sure they didn't overlap. Draw a diagram looking straight down and it'll make more sense.

After all that, you need to work on a radar display (to give the player a hint as to the location of the enemy), scoring details and extra features such as the high-score table and attract mode displays. Even then there's more to do: how about allowing the player to upgrade their own weapons? What about extra sneaky enemy tanks with homing missiles? Minefields? Fuel depots? That lot should keep you busy for months...

That, I'm afraid, is your lot for the time being. Sadly, I didn't get around to looking at programming the copper or adding sound effects, but you never know, we may get around to this in the future. I hope you enjoyed our little look at *C* programming on the Amiga, and I know from your emails that there were many of you trying to follow the course. All the words and code are included on this month's cover CD (in the In_the_Mag-/C-Course drawer) so you can have a good look at the examples without having to retype them.

If you want more *C* programming, make sure you drop the new editor a note and let them know.



It looks simple enough, but it's taken us over a year to get to this stage!



MailBag



Send your letters to: Letters To The Editor • Amiga Format • 30 Monmouth Street • Bath • Somerset • BA1 2BW or email: amformat@futurenet.co.uk – putting 'Mailbag' in the subject line.

SPARE US	SEND US
Ideas for adverts Amiga Inc. could make	Actual adverts you've made
Requests for old coverdisks	Ideas for new things for the disks
Chain bloody letters and junk mail sent by email	Ways to stop people sending chain letters and junk mail
Stamped addressed envelopes, expecting a reply	Good letters that we'll want to print and answer
Letters with no concept of spelling, grammar and coherency	Letters with some thought put into their subject and construction

YOU CAN!

I first bought your magazine many, many years ago when I was a young lad with an A500. I remember how much bigger the magazine was then too. I've recently subscribed to ensure some support for the Amiga and your magazine and I would like to make a few suggestions if I may.

I'd like to see more Reader Ads, maybe 50 pages if there was enough support for it. Why not? It would make the magazine bigger and if people didn't want to read them then they wouldn't – simple!

On the topic of more pages, I'd like to see more Workbench and Mailbag. That way people could see their letters getting through to the magazine. To be honest, I've written to a lot of magazines before and never had any letters published.

Also, I think considering how email is the mail of the future for speed and cost, why not have an email address available for sending to Reader Ads and Workbench? It's a lot easier for me here in Denmark to send an email to the UK then a snail mail letter, and I'm sure I would have some support from other non-UK residents.

I'd love to hear other readers' and subscribers' thoughts on all these ideas. Good luck with the magazine…

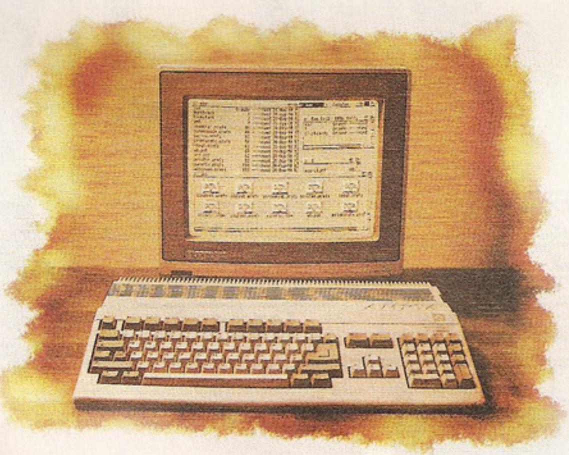
C. Klausen
Denmark

Well, thanks for the compliments. I first started reading AF *when I was younger and had an A500 too.*

I'm sure we could fill a lot more pages with Reader Ads. Unfortunately, the size of the magazine is determined by the number of advertisers and the number of readers, not by what we could think of to write about, otherwise it would be a lot bigger.

You can email Reader Ads and Workbench queries to us already – just remember to put "Reader Ads" or "Workbench" as the subject line and mail them to amformat@futurenet.co.uk.

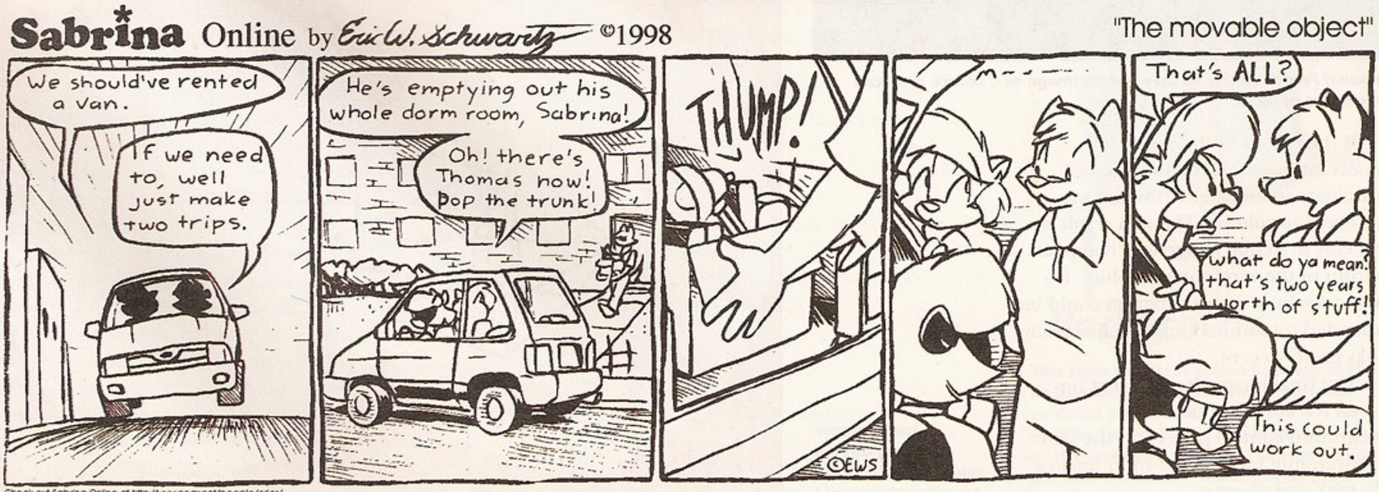
An A500 from the good old days…



B5

The other day, I decided to watch an episode of *Babylon 5* from my video collection, remembering that they used Amigas for the pilot. I sat there watching some incredible space battles done in *Lightwave* (though probably on a Pointless Contraption), but that's not the point of this mail.

It was as G'Kar spoke out that I realised how apt the following speech is to our current situation: "No dictator, no invader, can hold an imprisoned population by force of arms forever. There is no greater power in the universe than the need for freedom. Against that power, governments,



Check out Sabrina Online at http://www.coax.net/people/erics/

SHAREWARE SUPPORT

Hi guys, great magazine. I have every issue since being introduced to issue 32.

Anyway, enough of the butt kissing. I'd just like to let everyone know how helpful Oliver Kastl and everyone at Elaborate Bytes have been recently. Due to an introduction of monthly fees at my old provider (which I couldn't afford) I decided it was time for a change of address. Needless to say, I had to go through the rigmarole of notifying everyone I knew of the change of address. It then occurred to me that I needed to inform the makers of the relevant software that I own on my machine, so they could update their records too, and asked them if there was anything that I needed to do because of the software.

Most of the replies were of the "thank you" to the "you didn't have to worry" kind. However, on notifying Oliver Kastl of Elaborate Bytes not long after I had registered *IDEfix 97*, I was pleasantly surprised by his level of help. Not only did I receive a bright and cheery reply soon after sending my message, he also told me he would send me a new registration number to use if I needed to re-install the software.

You can see how happy I must have been when you consider that living in Australia and trying to get Miggy stuff and information can be like squeezing blood from the proverbial stone. Don't worry though, I'm a strong opponent of the PC and a rabid supporter of the Amiga.

Stephen Kinzett
Australia

It's good to see that authors as well as users are making the effort for the Shareware scene. I'm pleased to hear you're rabid, too.

Snippets:

I don't remember this being mentioned anywhere in the mag, but if you log onto the pop.freeserve.net server as your FULL email address, i.e. john@smith.freeserve.co.uk instead of smith.freeserve.co.uk, then only the emails sent to john@smith... will be downloaded. This allows you to keep your unlimited email addresses completely separate.

David McMinn
D.McMinn@eee.rgu.ac.uk

Thanks for the tip. I'm sure a lot of readers are now using Freeserve.

With reference to your comments a couple of issues ago regarding the demise of the Cheetah Bug joystick, anyone wanting one of these illusive items should contact Bill at Valley Soft in Canada as he stocks Bugs and will happily ship them to the UK.

His email address is: valsoft@renc.igs.net and his website can be found via the company index at Amigaweb. It's well worth a visit because he stocks a large amount of new and second hand software and hardware, gives an excellent service and is an Amiga user himself.

Kevin Owen
Andover

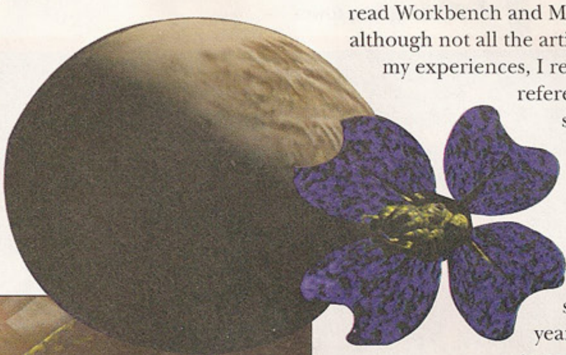
I'll look him up straight away!

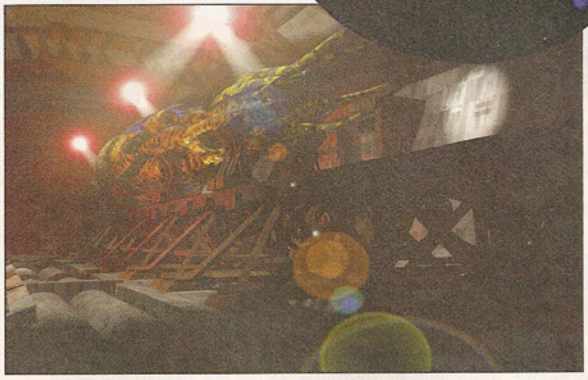
tyrants, and armies cannot stand. The Centauri learnt this lesson once. We will teach it to them again. Though it take a thousand years, we will be free."

Of course, for it to make sense you have to have knowledge of the B5 universe, and you have to replace 'Centauri' with 'Microsoft'.

If this gets in I'll be surprised, but I had to make sure others read this. As K.C. Harrison said in *AF118*, no surrender, no retreat. Who are the Vorlons then?

Paul Laycock
amipal@yahoo.com





Babylon 5 – you knew it used Amiga graphics, but did you know that it used relevant speeches too?

IN DEFENCE OF AF...

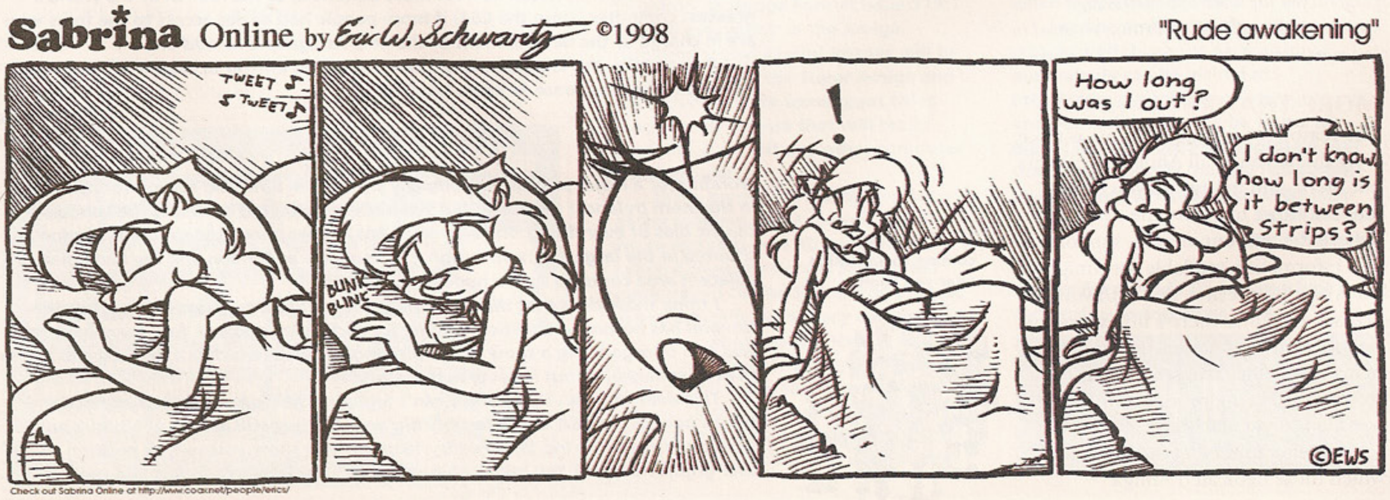
Issue 119 of *AF* came through my letter box on Thursday December 10th. During the day I read through all the reviews and news items in between the things I was working on.

Today I managed to find time to read Workbench and Mailbag, and although not all the articles relate to my experiences, I read them for reference. It would surely benefit Richard Tock and his friends to do this as well and they might learn something. Five years ago I was new to computers, but I bought and read, from cover to cover, every Amiga magazine available, and continued to do this every month until one by one they went out of publication, except *AF*.

I now have a vast collection of Amiga magazines with their contents databased so I can refer to any one of them if I need to know something. I have just got about 50 more from people that I've bought Amiga hardware from, through local second hand ads (a great resource if you're after an out of print issue or any hardware or software that's no longer manufactured).

I'd also like to take issue with Mr. Sharman's letter berating Tony Horgan about not following up his complaints about a faulty CD coverdisc. It clearly states in the magazine that any faulty discs should be sent to DiskXpress in Gloucestershire. Considering *CU Amiga Magazine*'s offices were in London, I fail to see how Tony Horgan is responsible for faulty disc complaints. In fact, I think I'm correct in saying that most, if not all

Continued overleaf ➡



magazine coverdisc complaints are dealt with by a separate company, and that the magazine editor and staff have no responsibility for faulty coverdiscs.

Personally, I'm delighted that *AF* has contributions from ex-*CU Amiga* staff – we no longer have the luxury of being able to compare reviews of the same product from totally unconnected sources to get an overall impression of possible purchases, so this is the next best thing.

I wrote to Tony at *CU Amiga* to thank him for his article on creating Amiga games, and although he was clearly embarrassed by my letter, he thanked me in a personal reply within a week. The moral of the story is, a little bit of thought before you complain about things that can be sorted out with a bit of common sense, please.

Pete Casson
Bristol

LANGUAGE!

I have recently just bought a second hand A1200 so I could do a bit of programming. I have a *C* compiler and I was wondering what other languages are available and which are the best compilers. I'm also considering getting *Linux 5.1* but I've never seen it on an Amiga before and was wondering if it's any good.

Your help on this matter would be much appreciated.

Jared Holdcroft



Redhat Linux scored a healthy 82% in AF120.

Quite a variety. Although C is most used on the Amiga, you can also find versions of older languages like Fortran *and custom languages like* E. *Which language is best really depends on what you're writing.* Linux *is an operating system so it's the same, more or less, on whatever platform you use it on. The latest Amiga-specific release was* Redhat Linux, *reviewed in last month's issue.*

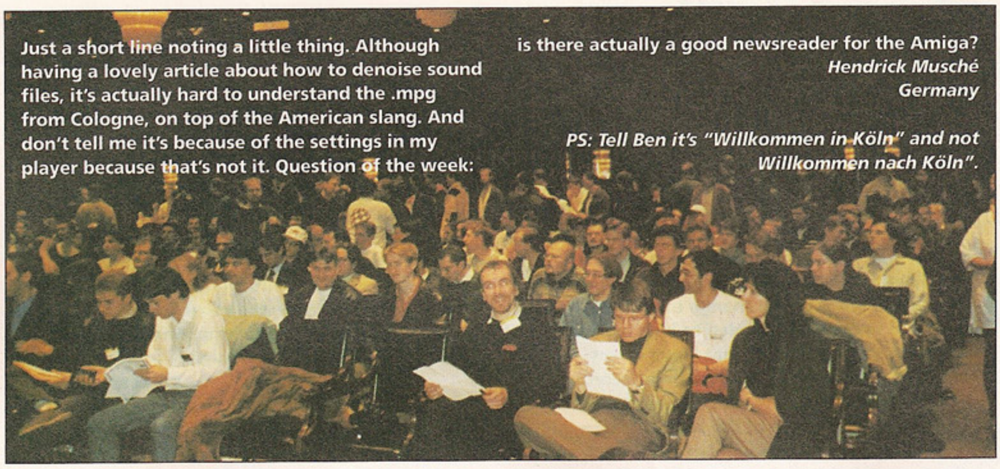
MORE THANKS

The reason for writing this time is to say a big thank you to all Amiga developers out there, and to urge all you Amiga fans out there to get on the net. I can't believe the amount of help, support and information available for Amiga users on the Internet, and with your Freeserve feature there's no excuse for not giving it a go. It's amazing how many new games and serious bits of software are being produced for this so-called "dead machine".

I'm also amazed at the limits to which those dedicated Amiga programmers push the old A1200 hardware. I never thought that I would be playing games like *Quake*, *Doom* and *Myst*, to name a few, on my trusty A1200. I can't wait for *Napalm*, and still they come: *Lambda C*, *The Settlers II*, *Wipeout 2097*, *Z*... the list is getting bigger. I also never thought I'd have my A1200 running dual processors, PPC and 68K, at over 160MHz, and have the whole thing in a tower.

The point of this letter is, well, just to say a big thank you to all who play a part in the continued development of the Classic Amiga range. It's your skill, dedication and commitment that have pushed the Amiga to perform technical feats not thought possible when it was launched. Without you there would be no Amiga, let alone a next generation.

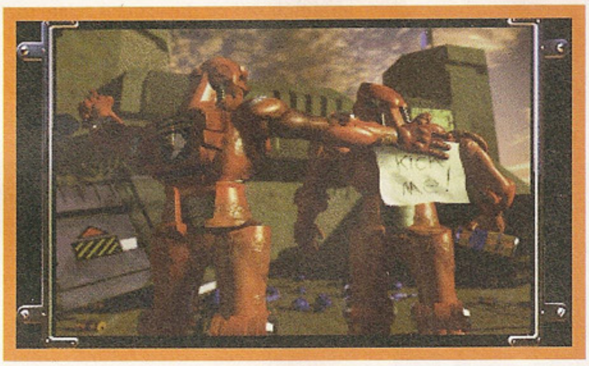
Nick Sawyer
via email



Just a short line noting a little thing. Although having a lovely article about how to denoise sound files, it's actually hard to understand the .mpg from Cologne, on top of the American slang. And don't tell me it's because of the settings in my player because that's not it. Question of the week: is there actually a good newsreader for the Amiga?

Hendrick Musché
Germany

PS: Tell Ben it's "Willkommen in Köln" and not Willkommen nach Köln".





The future of the games market on the Amiga is looking very bright indeed, with several big-name releases planned for 1999.



The *Settlers II*, coming to an Amiga near you soon.

LET'S DO THE SHOW RIGHT HERE!

I read with some interest your January 1999 (*AF119*) issue, where the main feature was the Computer '98 Show in Cologne. This lead me to consider the locations of the main Amiga shows in this country, which always seem to be held in London.

Are we Miggy enthusiasts who live nowhere near the capital therefore unimportant? London isn't the easiest city in Britain to reach for people who live in places such as the north east, is it? What I'm basically trying to say is that wouldn't it be possible for Amiga-related shows to be held in other parts of the country, such as Birmingham, Manchester, Newcastle or wherever, so we can spread the good word and all that? It would be a lot more beneficial to the rebirth of the world's greatest computer (since the C64) if more people had easier access to the folks who are in charge of the development of the new Amiga and its add-ons.

One more point: is it just me or does the Sword Master in *Monkey Island* bear an uncanny resemblance to Spice Girl Mel B?

Nicholas Rock
Stourbridge

Working for a major publishing company situated in Bath and having formerly lived in Northern Ireland, I can't help but sympathise with your views on the London-centric bias of everything. The argument has always been that shows in London are situated in the largest concentration of attendees, as London and the immediately adjacent area contains such a huge population.

I think these days that this isn't really relevant to the Amiga market, but the Novotel has become a traditional home for such events now. A few years back there was talk of organising a show at the Birmingham NEC (which is a lot easier to get to than Hammersmith) but it never materialised.

This doesn't mean that people can't organise their own shows. Many of the shows held in the USA aren't terribly big and yet they still attract exhibitors and support from Amiga Inc. Why not try to organise a show yourself, or petition a local user group to do so? You might be surprised at the level of support you receive.

FREAKY LETTERS FROM BELGIUM

First of all, let me tell you that issue 119 was excellent. I wish all coming issues are the same in terms of quality.

1 There are less (game) previews, but the previews included are all showing games that have a strong potential to reach their final state. Good!

2 More Mailbag. It's good too as people want to talk and express their feelings about the future of the Amiga. It's excellent!

3 Reviews, many. It's probably the after-Cologne effect but anyway, there are plenty of them.

4 News, good news. I dream of a bright future.

5 100 Issues Ago is still there. Keep it up, it's always interesting to get back and see the evolution of things, especially prices for specific hardware. By the way, who had the idea for this section?

6 Tutorials, hmmm… *Amiga Format* is not a brain-dead oriented magazine that's dedicated to lame player-only readers. Amiga freaks are some kind of smart, you know, so keep them interested!

7 Flat cats on page 63. Err, does www.catscan.com really exist?

8 Good balance of articles and advertising.

9 My freaky letter on page 82 (ah, ah). I was not so serious, you know! I really wondered if you'd publish it, but you are even worse than me because you did! No, really, issue 119 is too good. By the way, what about a corner called Freaky Letters From Belgium where I'll send you the funny things I spotted from the previous issues? Ah, never mind…

Philippe Dumont
Aywaille, Belgium

I'm glad you were pleased with issue 119. Of course, we try to bring you the best for your Amiga every month, but we've been helped in the last few issues by the amount of good news and good products appearing on the Amiga scene. We do try to balance the tutorials so there are plenty of things for beginners and experts. You'll be pleased to know that Simon Goodwin will be starting a new series next issue which deals with more technical subjects for hardcore users. The flat cat site does, sadly, exist. I'm surprised the RSPCA hasn't put a stop to it, but you can see some high resolution moggy manipulations at http://www.cat-scan.com. And thanks for your suggestion for a regular column. Er, we'll let you know…

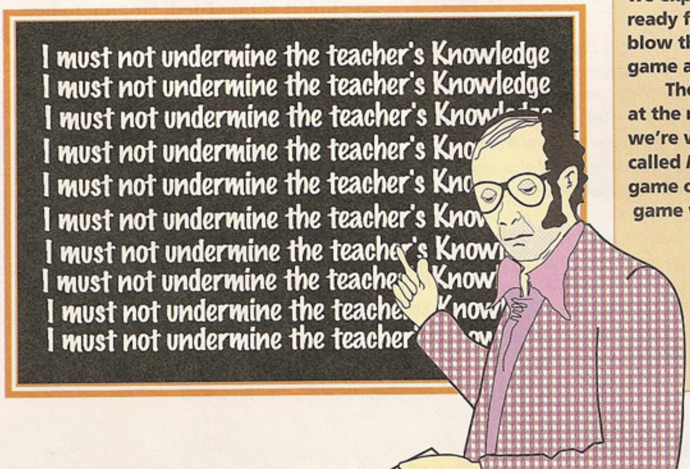
BACK TO SCHOOL

With regards to Leon Brown's letter (School's In) about getting Amigas into the education system, I would just like to tell him and every other Amiga lover, worshipper and people who just own Amigas, that I took my A1200 with 85Mb HD and 10Mb RAM into school and set it up in the IT room. To my technology teacher's surprise, it was faster than the fastest Acorn 3000.

After taking him on a guided tour of my A1200 with *NewIcons* installed, he told me that he was very, very impressed and was going over to the First Computer Centre in Leeds to buy one of these incredible machines for use in his classroom. Anyway, keep the excellent magazine going strong and please slap a few real stickers onto the front cover.

Paul Wood
Huddersfield

Sadly, most people's perception of the Amiga is based on an unexpanded A500 they saw eight or nine years ago. That's why they're surprised by what a modern Amiga can do, and even more sadly, there is little opportunity for them to see one in action. I hope your technology teacher is now a convert.



€?

I note that from January 1st 1999, most of our keyboards became out of date. While we have suitable signs for the older major currencies like $, £, etc, we lack the sign for the new Euro, which has now become important on the world markets. While I may well have missed a note on this in some of the more recent copies of *Amiga Format*, I haven't found any reference to this problem. I've been trying to combine an uppercase C with an equals sign written over it, but without success.

I have a particular interest in this problem as I have worked most of my life in other parts of the European Union and my pensions are therefore paid by other authorities than those in the UK. As such, I have to use the symbol in my personal accounts.

John E. Hooper
Peebles

The only thing you're likely to get with an upper case C and an equals sign is a reminder of times gone by. Although your keyboard is out of date, your real problem is the lack of a font with a Euro symbol in it. Don't worry, I'm sure one will appearing on our CD very soon.

HOW MUCH?

I know you'll probably get a lot of emails about the rise in price of *AF*, but I just had to write. This is the first time I've ever had anything bad to say about your magazine, but come on, £5.99 for the floppy version with 107 pages including adverts is crazy. I wonder how much the CD version is now. Ten quid?

I wonder if the price change has anything to do with the fact that you're now the only Amiga magazine available and you know that Amiga users have no alternative. Future Publishing's profits must be increasing, that's for sure.

Peter Luckhurst
peter@realm98.freeserve.co.uk

Six quid!? You've gotta be kidding me! I'd hate to know how much the CD version costs…

Matthew O'Neill,
via email

Well, actually, these are the only letters we've had on the subject so far. Just as a matter of interest, the CD version hasn't gone up in price and nor is it going to for the foreseeable future. In case you're reading the CD version and don't know what everyone is talking

Continued overleaf ➡

FURTHER DEVELOPMENTS

In reply to the letter 'Developing Situation' in *Amiga Format* issue 119, I can tell everybody in the Amiga community that Digital Images will be fully supporting the Super Amiga and we expect to have some great titles ready for its release that will really blow the socks off any other computer game around.

These games are mainly top secret at the moment, but I can tell you that we're working on a 3D beat-em-up called *Kijitsu Warriors*, a 3D football game called *Digital Soccer* and another game which is in the very early stages.

These games should also be released for Amiga PPC and they will really show people what the Amiga can do! We expect to be able to release some pictures soon of what *Digital Soccer* and *Kijitsu Fighters* will look like when they are completed.

I can be emailed at this address: stuart@digital-images.demon.co.uk, our website can be visited at: http://www.digital-images.demon.co.uk, and our mailing list can be found at: digital-images-subscribe@egroups.com. Our announce only mailing list: digital-images-news-subscribe@egroups.com.

Stuart Walker
Digital Images

Thanks for the info Stuart – we look forward to seeing those games.

Digital Images

C FOR CAUTION

I thought that *AWAGI* by Daniel Thornton from *AFCD33* was brilliant but it was spoilt by putting bad language on it.

Is there a clean version that we could have, please? I can't use the other one as I'm a childminder and I have two young children of my own who use the computer as well.

Anton Gregory
Walsall

It's a fair point. Although as the creators of something it's at your discretion what you choose to include, please bear in mind that some content could offend and restrict your potential audience.

about, the price of the floppy version of AF *has risen to £5.99 to match the price of the CD version.*

The reason why the floppy version has increased in price has nothing to do with anything other than the fact that the floppy issue has become more expensive to produce. Double Density floppy disks are in short supply (the Amiga is the only major platform which still uses them) and hence cost more.

In fact, it costs more in materials and duplication to produce the floppy issue than the CD issue. Faced between the choice of simply not having a floppy issue or paying a quid more for it, which would you rather have? Oh, and it's 108 pages – bits of paper always, in my experience, have two sides.

MOAN, MOAN, MOAN

Reading Mailbag recently, I was struck by the reduction in whingeing. I don't know why you bother to reply to the idiots who complain about paper quality and suchlike, nor the one who criticised the excellent article on programming a Pic chip. Okay, not everybody is clever enough to do it, but it's good to know you could if you wanted. Tell the ones who still whinge that the rest of us, who live in the real world, like *AF* the way it is and appreciate your efforts.

Going back to whingeing, I'm pleased we no longer get the letters from people complaining that 'it won't work on my A500'. I was struck by how far we've really come with our Miggies. I had a fairly major crash the other day which corrupted a fairly big partition on my internal hard drive and I've just completed backing everything up and moving things about on my backup Jaz cartridge. It took less than 15 minutes to achieve – it makes life so much easier than having to do it with floppies.

The first 'backup' device I got was an external Zip, which was great and much faster than doing things with a floppy, but I quickly found that although 95Mb was an improvement, it wasn't until my wife asked me what I wanted – really, really wanted – for Christmas and I said a Jaz that I really appreciated what hard drive Heaven was really like. It has to be the best peripheral I ever bought – it's lightning fast, probably approaching twice the speed of even my fairly fast hard drive and it's so easy to use.

I now have one cartridge with its 1Gb partition and a second used entirely for backup, partitioned into 2x 510Mb partitions. It says in the book that you can't partition them, but believe me you can and I love 'em.

Ian Aisbitt
iana@messages.co.uk

Well, we try to be fair to everyone and let everyone air their views, even if they are obviously wrong. I think a lot of people just like to take their frustration out on someone, and Amiga owners have had a fair bit to be frustrated about.

As for the Jaz drive, I'm glad you've found it useful. We had a few unpleasant experiences with ours, but it's undoubtedly more useful than a tape streamer.



Despite some problems we've had with Jaz drives, they can make a superb backup device.

AMIGA LEGACY

Recently, a dear old friend of mine departed from this Earth, hopefully to a decent place that he deserves. He will be missed for many reasons. I'm writing because he's left me an Amiga 2000 with 2.04 ROM, an external floppy drive and some disks. One of those disks is your *DiskMaster 2*, which interests me a lot. Unfortunately, my experience hasn't progressed beyond my C64 (having worn out my VIC 20). I would very much like to take advantage of the above disk (published as a coverdisk for *AF* 55a). So, I have the disk and from what I can see, it's something I could use. The problem is that I don't know how. Is there any literature that could assist me along these lines?

Any and all information would be very much appreciated. Hoping to hear from you soon. Thanks.

I. Lentzner
Ontario, Canada

We don't normally reply personally, but I found a spare copy of AF55 *so I'll send it to you.* DiskMaster 2 *is also available, with docs, from Aminet, in the util/dir/ drawer. You should also consider buying an upgrade to WB3.1 (available from Power Computing) and getting a subscription to* AF *if you want to get the best out of your Amiga. Meanwhile, if you need any advice or help, just drop us a line – that's what we're here for!*



Please don't ask for old coverdisks as we don't normally send them out!

PPC ON E'S?

I've written in before with suggestions on improving the Amiga's image but I think this idea could work. It came to me while watching the very old Jesus on E's demo which appeared in the early '90s. I was thinking about the current state of the Amiga, with the PowerPC chips appearing in many machines (not enough in my opinion) and people buying graphics cards in order to play *Quake* or other games that are now out.

What if all the enthusiastic Amiga users out there, with their powerful machines and creative brilliance, produced their own super demos using the high quality sound and graphics cards? It could be a joint effort, possibly with *AF* and Amiga International as organisers of the project, with a view to putting the finished demo on video, film and even DVD discs. Then the hype can start early and people can be impressed when they go to the cinema (to see the Amiga advert), watch a video or download the demo from the Internet.

You could advertise the competition in the Amiga sections of *The Mix* and *Future Music* mags too, meaning more coverage for *AF*. On a less serious note, I noticed that pages from the December issue of *AF* mysteriously appeared in the November issue (I think) of *TV Zone*, and the individual *AF* pages were put in the magazine in perfect numeric sequence with the *TV Zone* pages. I'm sure you must know about this already and I noticed that the mistakes were omitted from the magazine a couple of weeks later, with the correct pages inserted. Can you shed any light on this funny, but probably quite serious, problem?

Chris Hindley
Deeside

Well, there have been a few PPC demos released, but so far these seem to be rather tricky to get to work. In the typical demo coder mentality, they'll only work on one particular setup. Stuff coded for the PPC tends to need to be more system friendly, not less, and I think that's what a lot of the coders have difficulty with. I hope to see some better demos soon.

As for the TV Zone mix up, we were quite surprised too! Both mags are printed at the same place, so we can only assume there was some sort of unfortunate confusion, though obviously the TV Zone readers should be delighted at having been provided with all that free enlightenment...


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Eyetech tower £50, keyboard interface with keyboard £25, IDE interface £15, extension cables for squirrel £15, Philips 8833 II monitor complete with cables £90. Email stedolan@hotmail.com or ☎ 01704 834985.

Theme Park CD £7.50, Syndicate £8, Aminet 16 £6.50, F1 Licenceware £6. For full list of games, please write to: Mr. A. Jackson, 7 Nut Tree Close, East Huntspill, Nr. Highbridge, Somerset, TA9 3PN.

A1200 Infinitiv tower, 32Mb, '030/40MHz with FPU. 1.3Gb hard drive, 8x CD-ROM, 8833 II monitor, external IDE-Atapi case, Epson Stylus 500, bare A1200, loads of original software. All for £700. Email elias.savvidis@usa.net.

A500, boxed and in excellent condition with a Mitsubishi Cub monitor, software, joystick, manuals, etc. All for £30 plus postage or buyer collects. ☎ Ron 01494 785711.

Canon Studio, Pro-Gamble v2.2, Pro-Greyhound v1.1, EZ-IDE, all fully registered, £10 each. Buyer pays postage. ☎ Gordon 01282 779156.

Educational software. Six from the 10/10 series, Kid Pix and Simon the Sorcerer, £10. 1998 Epic Encyclopedia, £15. All for £20 plus postage. ☎ Richard 0181 4523389.

Cinema 4D v4 (CD) unused, unregistered and in mint condition. Fully complete with manuals, registration docs, guarantee. Cost £99.95 but will sell for bargain £50 plus postage. ☎ 01405 860798 any time.

External floppy drive £12, Amiga Programmers Handbook, Volumes one and two, £10 each. Last 12 issues (to 119) of Amiga Format with coverdisks, £25. Issue 62 onwards also available. ☎ Alan 01276 600119.

A3000 (tower) PSU. Brand new, still boxed (purchased in error). £65 includes postage. ☎ Pete 01902 844951 after 6pm.

Amiga goodies: Syquest drive (270Mb) £25, 68060 SCSI 2Mb RAM £180, 200Mb hard drive £10. Tower bits: Catweasel £15, IDE interface £5, keyboard interface £5, floppy drive and mouse £5. ☎ 0181 6730188 after 8pm *today.*

A4000 '040 desktop with CD-ROM, Picasso II card, £450. Merlin graphics card £80, A2091 SCSI card, new, £50, A1200T SCSI CD-ROM £250, Magnum '040 25MHz GWO £80. ☎ 01793 491981 any time.

Prelude sound card £100, Delfina DSP sound card £150, Blizzard SCSI board with 32Mb £40, Zorro II busboard A1200 £80, IDE Zip drive and 3 carts £60, Buddha IDE interface for Zorro £30. ☎ Mark 0958 476403.

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CD-ROM, 10 speed SCSI external with Squirrel interface, £65. Also, games for sale, £3 each, boxed. Phone for details. ☎ John 01900 63568.

PicassoIV true colour graphics card, £150. ☎ 0191 4174189.

Deluxe music v2.0 by Electronic Arts – create, publish and perform music. Boxed in perfect condition with manual, £35. ☎ 01225 885186 (Bath). Ask for Dave.

WANTED

Manual for VIDI Amiga 24RT. Also for Roctec genlock and Theme Park (AGA). All were purchased second hand with manuals missing. Kenny, 25 Simpsons Lane, Knottingley, West Yorkshire, WF11 0HG.

Aladdin for A1200 and other standard A1200 games. ☎ Gordon 0113 2947696 after 6pm.

Copy of Amiga Hard Drive Users Guide. ☎ Denis 01642 272285.

Desperately need information on how to set up Amiga CD32 and SX1 expansion box to connect to an A1200. If possible, manuals would be nice. ☎ Daz 01978 352173 after 5pm.

CM Italia, any version, must be in good condition. Will pay up to £10. ☎ Mr. Elliott 01753 570274.

Latest AHI sound file from Aminet. I can't get sound on Genetic Species and need help. Roy, 32 Ailsa House, Fairhaven, Green Idle, Bradford, West Yorkshire, BD10 9ND. ☎ 01274 616884.

External CD-ROM drive wanted for A1200. Email smithd@abel.co.uk or ☎ 01228 598796 or write to: David Smith, 168 Edgehill Road, Harraby, Carlisle, Cumbria, CA1 3SA.

Don's Genies for ProPage 4 or other extras for ProPage. ☎ 0115 9780202.

Goblins or Goblins 2. Full game with code book needed, or disk 2/3 as our disk keeps crashing. ☎ 0121 7069005 (Solihull).

Syquest EZiDrive 135Mb cartridges. ☎ 01203 505458.

Lightwave (any version with manual), Hired Guns disk 4, cover CD from last issue of CU Amiga, 33.6K external modem. Reasonable prices paid. ☎ Sam 01455 291716 (after 6pm).

Premier Manager 3. Desperate to obtain copy of instruction manual. ☎ Mel 01308 456685.

PicassoIV graphics card and Blizzard 1260 accelerator card or similar. ☎ Craig 01258 861564.

Alien Breed 2 (A1200), Alien Breed Tower Assault, Alien Breed 3D 2, Pole Position or any good F1 management sim. Prefer CDs, disks accepted. Kenny, 25 Simpsons Lane, Knottingley, West Yorkshire, WF11 0HG.

VIDI Amiga 24RT digitiser and software. Will consider 12RT also. ☎ 01773 513765.

PERSONAL

Also see the AmigaAngels document on our CD.

Hello, my name is Yasir. I can't hear – will you be my friend? I am deaf and dumb. Kindly reply soon, thank you. M. Yasir Qureshi, H-NO/D-582, Satellite Town, Near New Passport Office, Rawalpindi, Pakistan.

Browsing the net? Then why not drop by my site at http://www.paddy1.demon.co.uk There are tutorials, info and opinions on Amiga hardware, software and more!

Any Amiga friends out there who want to meet? Write to me, John, at 5 Haystone Place, Millbridge, Plymouth, PL1 5DU with your telephone number. All letters answered. We can help each other.

Pen friends wanted. Please contact Maher Fahmy Farag, Al-Sawra St, Al-Mahmoudia, Al-Behira, 22718, Egypt.

BBSes

Send your BBS ads to the usual Reader Ads address. BBS ads will be printed for three issues.

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X Zone BBS, supporting the Amiga for over two years. Do you want the latest files? ☎ 01635 820590, 6pm to 1am, modem callers only (33.6K). Call now.

Moonlight BBS, Bedford, online 6pm-8am, 24 hours at weekends, ☎ 01234 212752.
Sysop: John Marchant. Email gnome@enterprise.net. Official Amiga Support BBs, unlimited downloads, very friendly sysop with excellent Amiga knowledge. Aminet online. Run by a qualified programmer who will help you out for free.

L's BBS, Kent, online 6pm-midnight. ☎ 01795-511103.

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Xanadu BBS, Wigan, online 24 hours. ☎ 01942 746342.

Elevate BBS, Hants, online 24 hours. ☎ 01329 319028.

Echoes BBS, (Camberley). Line 1 ☎ 01276 502641, 56K, 24 hour. Line 2 ☎ 01276 502642, 33K, 24 hour. Sysop – Steve Barnett. http://surf.to/echoes.bbs. Latest Aminet downloads, nine online CD-ROMs, Fidonet and other mail networks. Offline reading available and free email to all members. In fact, free everything – no subs of any kind as the BBS is run for the love of the Amiga and Xenolink software.

Black Magic BBS, ☎ 01788 551719 after 10pm, over 6,000 files online.

Frost Free BBS, ☎ 01484 327196 (Slaithewaite, W. Yorks).

USER GROUPS

User group ads will be printed for three issues.

For the latest Amiga news, reviews, articles and interviews, visit the AIO website at http://www.amiga1.demon.co.uk/aio.

Any Amiga users in Birmingham wanting to set up a user group? Please ☎ Hitesh 0121 6056452.

Amiga free helpline requires Amiga users to help other Amiga users. ☎ Terry 01709 814296. Also, will Robert Williams of SEAL please contact me?

New Amiga sound and demo association seeks input, contacts and support to form a user group based around the Amiga music and demo scene. Interested? ☎ Daev 01243 864596 or 0961 985925.

Do you need/can you help with the Amiga at all levels? If so, ☎ Terry 01709 814296.

West Lancs Amiga User Group meets Sundays 1pm-4pm at St. Thomas the Martyr School Hall, Highgate Road, Upholland, Lancs. ☎ Stephen 01695 625063 or Ralph 01695 623865. Email ralph@twiss.u-net.com

Any Amiga users in Leicester want to set up a user group? Please write to S. J. Webb, 3 Gregory Road, Barlestone, Nuneaton, Warks, CV13 0ET or email sjwebb@mailexcite.com

Greenford Computer Club. 180 Oldfield Lane South, Greenford, West London. Meets: Thursdays 7-10pm. All welcome. Anything Amiga. ☎ Richard Chapman 0181 9988599 after 7pm weekdays, all day weekends, or email if97rrc@brunel.ac.uk.

SEAL, South Essex Amiga Link. Meets twice monthly at Northlands Park Community Centre, Basildon, Essex. Phone or email for dates and directions. Offers help, advice, tutorials and presentations on popular software and hardware. Also scanning, printing, email and a quarterly 36 page A4 magazine. Contact Mick Sutton, 20 Roding Way, Wickford, Essex. ☎ 01268 761429 (6-9pm). Email seal@thunder.u-net.com or visit http://seal.amiga.tm

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Stocks all Amiga products, including a new A4000 tower and the latest products from phase 5.

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All hardware and software and also make own cables. Very professional and helpful.

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New and used hardware and software, repairs, tech support and advice. Family run, helpful, will custom-make tower systems and will give any hardware a custom colour scheme of your choice.

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☎ 03 9331 5600, fax 03 9331 5422.

Desktop Utilities, Shop 13, Manuka Court, Manuka, Canberra. ACT.
☎ 02 6239 6658.

MVB Computer Supplies, 506 Dorset Road, Croydon, Victoria.
☎ 03 9725 6255.

Synapse Computers, 190 Riding Road, Hawthorne, Queensland.
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SES Computers, 88-90 London Road, Southend-On-Sea. ☎ 01702 335443.
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Game, Sheffield Town Centre.
☎ 0114 2729300.
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Tech-Exchange, 3 Forest Road East, Nottingham, NG1 4HJ.
☎ 0115 9100077.
All Amiga products and a helpful and knowledgeable staff.

Chips, 8 Watchbell Lane, Newport, Isle of Wight.
☎ 01983 821983.
Lots of classic games and older Amiga hardware.

Vortex Services, 13-15 St. Michael's Square, Ashton Under Lyne, Lancs, OL6 6LF.

Electronics Boutique, 30 The Mall, Golden Square, Warrington, Cheshire.
☎ 01925 240731.
A good selection of Amiga software and peripherals.

Electronics Boutique, Unit 120, 3 Russell Way, Gateshead Metrocentre, Gateshead, Tyne & Wear.
☎ 0191 4602637.
A small selection of about 40 different games and utilities, mainly older but some new. Also some peripherals.

Electronics Boutique, Gallowtree Gate, Leicester city centre.
Stocks most games, although it does tend to be a bit slow on new games.

Electronics Boutique, 81 High Street, Meadowhall Centre, Sheffield.
☎ 0114 2569060.
Games, utilities, mice, educational software and can order software. Helpful staff.

Electronics Boutique, Unit 19, St. John's Centre, Perth, PH1 5UX, Scotland.
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Software and peripherals and will order any Amiga games you require.

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Computer Cavern (Capri CD Distribution), 9 Dean Street, Marlow, Bucks, SL7 3AA.

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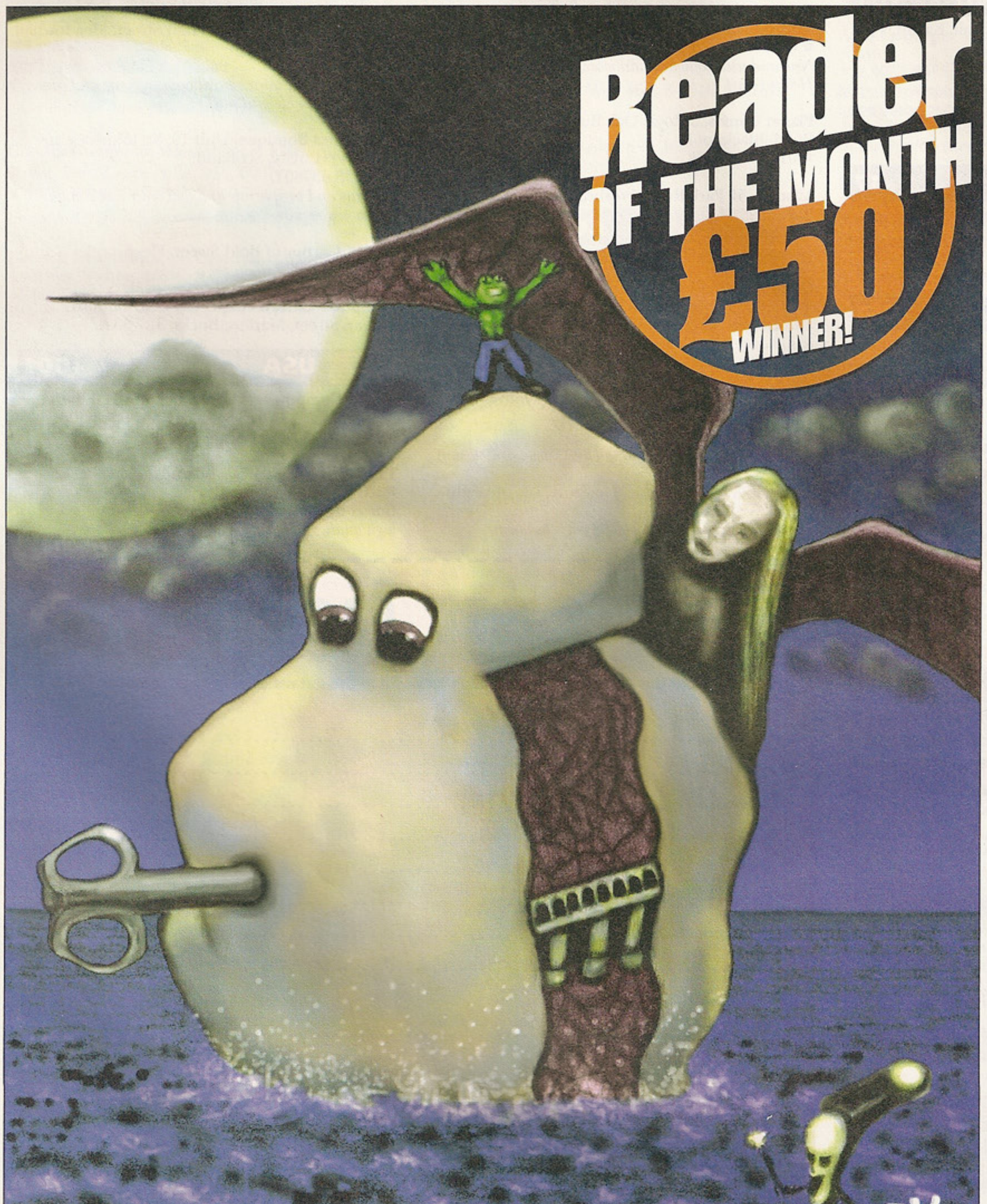
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The Gallery

ON THIS MONTH'S CD

AFCD37:-ReaderStuff-/-Gallery-

Welcome to The Gallery! **Ben Vost** walks around your artwork and strokes his chin.

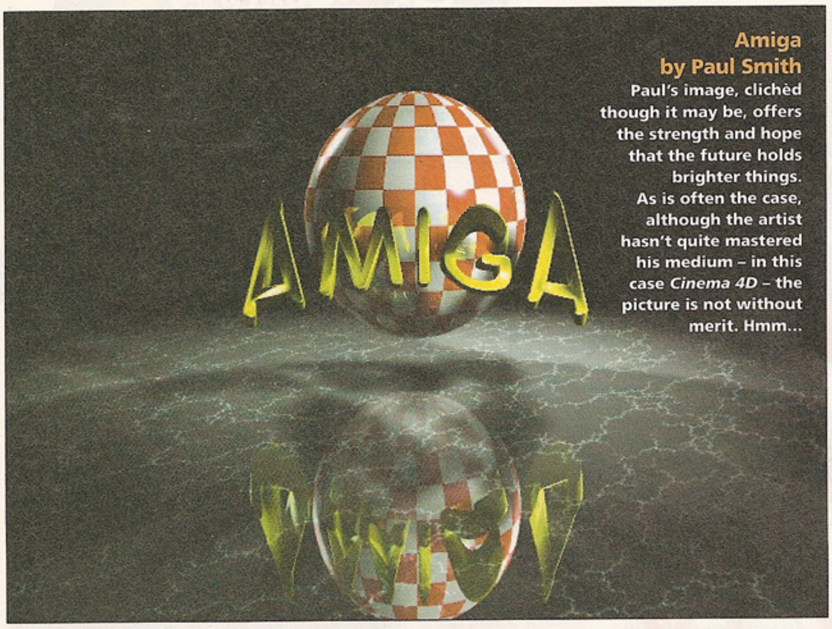


Angel (above) by Dave Higton
Dave's picture borders on the abstract and has a Dali-esque feel about it. The mixture of the whimsical and the realist is particularly nicely juxtaposed. Hmm...

DupahBack (below) by Kevin Jones
Kevin's plea for assistance in writing a "game" has overtones of a Kafka-esque escape into what we critics call "irreality", and his image echoes that with its dark, brooding, circular shapes. Hmm...



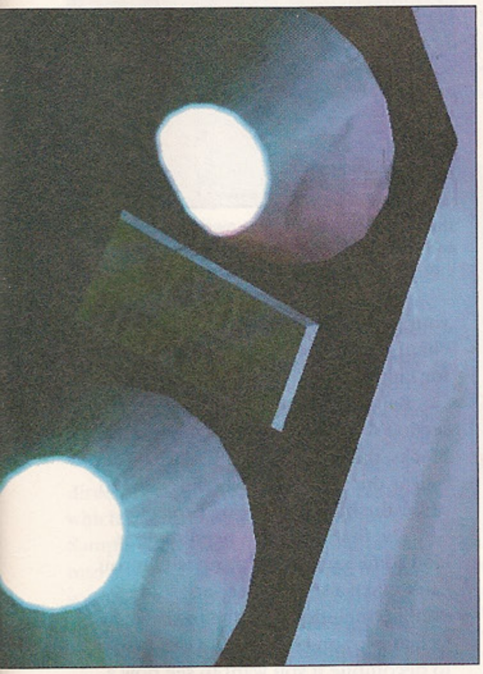




Amiga by Paul Smith
Paul's image, cliched though it may be, offers the strength and hope that the future holds brighter things. As is often the case, although the artist hasn't quite mastered his medium – in this case *Cinema 4D* – the picture is not without merit. Hmm...



Dream (above) by Sascha Brandt
Sascha has a thing for anthropomorphised creatures and this picture is no exception. Although the composition is somewhat maudlin, the tones of the background – the impressionistic beach – are nicely rendered. Hmm...





Lamp (above) by Antti Tuominen
Antti's antics with the multi-platform *POVRay* prove to be of good use here. Interesting how the artist likens his artistic efforts to programming, two skills one would think on first impression to be completely opposite. Hmm...





Fantasy and Nature (left, above) by Dimi Katsafouros
Choosing the diminutive "Dimi" instead of his full name, "Dimitris", indicates that the author wishes a childlike avoidance of responsibility, and this extends to the fact that these pictures are not hand-drawn, but rather are rendered in a fractal landscape program. Hmm...



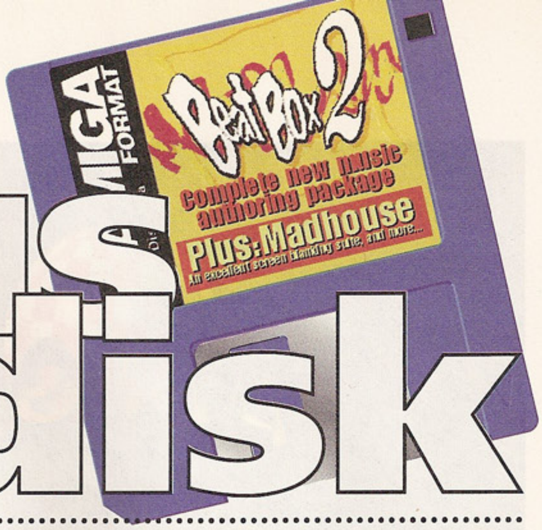
LemmingtonTokersville by Gareth Davidson
Based on a hand-drawn image and then scanned and moved to the digital realm, Gareth's oeuvre hasn't lost any of its immediacy and vibrancy in the transition. The parallel drawn between drug abuse and art is quite apposite, I feel. Hmm...

CONTRIBUTIONS

If you'd like to enter your work for the Gallery in *Amiga Format*, read the Reader Submission file on the CD, or simply send your work to: Gallery, Amiga Format, 30 Monmouth Street, Bath, BA1 2BW, making sure you include the reader warrant from the CD pages in this mag.

Serious disk

AMIGA FORMAT





Dave Taylor unveils this month's top selection of Amiga programs and utilities. A fun, new music package, complete for you to use, tops the bill.

BeatBox 2

You may not be a musician but if you've always fancied dabbling with a few notes on your Amiga, *BeatBox 2* is just what you're looking for. It doesn't have all the complicated clutter of *OctaMED* because most amateur users just want to be able to string a few samples together in an organised manner and need very few editing features.

Don't get us wrong though – as the examples show, you can create some complex music with the program, but it provides a gentle introduction to the world of music because of its simple interface.

When you open the *BeatBox* directory, you'll need to install the program using the Commodore Installer interface, but it does everything automatically for you.

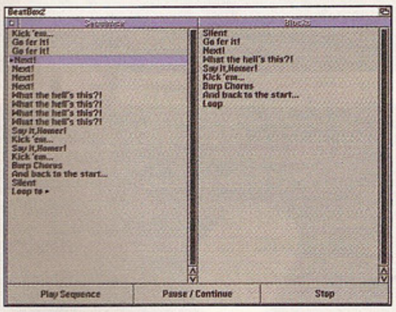
When you load the program itself, you may be asked to choose some program preferences for the screen resolution, but you can change these from within the program's Project menu if you want to do so later.

> "There are some samples included with the package, as well as two songs which you can load in..."

The program itself is split into two levels. The top part has four rows of sixteen boxes. Each box can contain a sample. The four rows represent the channels and you can have up to four samples playing at the same time. The total view you have is of one block from your project, a block made up of four channels, each containing sixteen places for samples.

Below the block area is the control section with areas for the samples, the blocks, the tempo and the playback, as well as the sequencer, which is used to order the blocks in a song project.

The first thing you need to do is load some samples, without which you can't make a song. There are some samples included with the package, as well as two songs which you can load in to decompile if you want to see how a

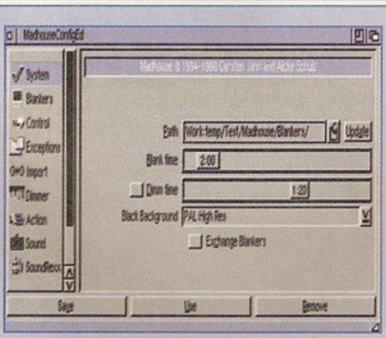


The sequencer window for *BeatBox 2* is simple and easy. Just left click on a block to enter it into a song and right click on one to remove it.

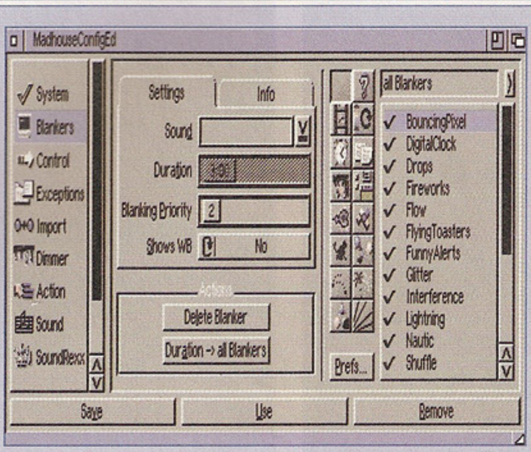
MADHOUSE

This is a wonderful screen blanking utility that comes with a wealth of ready to use blankers. The configuration editor uses *MUI* and allows you to easily enable or disable the blankers that are used from the list – by default, the system chooses a blanker at random each time the blanker kicks in. You can choose all the delay times and the activation keys for enabling the blankers instantly. You can also choose what should be used to wake the screen back up – keystrokes, mouse movement, etc, and whether you should be able to stop the blankers kicking in by leaving the pointer in a corner. All the options you expect are here in what is a very comprehensive package.

From stars to lightning and from snow to dimming, *Madhouse* is an accomplished package that's well worth investigating. There's a pop up control key for the configuration editor and it can also be accessed from Workbench's Tools menu. *Madhouse* is Shareware and requires registration so please see the documentation.

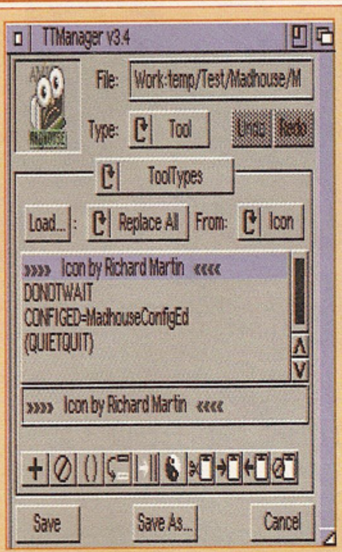


The main screen allows you to choose the blanking time. The left hand side of the screen has access to the other options, such as sounds and activation keys.



The blankers section not only allows you to choose which blankers are active in the list but also what options are enabled for individual blankers.

TTMANAGER 3.4



ToolType Manager 3.4 is a big improvement on the already impressive 3.3 and is an essential add-on to a modern Workbench.

Since v3.3 of *ToolType Manager*, there have been a whole host of changes, including a redesign of the interface. In a nutshell, *TTManager* replaces the Information menu item for Icons in Workbench. Instead, you click on an icon and select *TTMananger* from the Tools menu and a complete icon management system is opened. There are so many enhancements that it's a completely different beast from the bland original. You can change ToolTypes and icon types, copy and paste and do lots more, so try it for yourselves and check out the documentation. *TTManager* is Giftware.

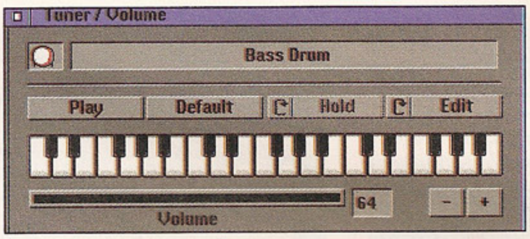
completed song looks. The samples from the package will be installed by default into a directory on the root of your drive called Samples. Right click at the top of the screen to open the menu and choose Samples/Load Sample from the menu – if you don't have the mouse at the top of the screen, the menu won't appear. This is because the right mouse button does different things within the main screen area.

Load in each sample from the directory. You don't need to worry about which instrument is selected in the Sample area as each sample will be put into a list in the order you load it. As you load a sample, you'll be asked to assign an icon to the sound. This is so you'll be able to see which sound is entered in the block when you use it.

When you have a few samples loaded, click on the Select Sample button at the bottom left. You can now select a sample from the list to enter into one of the cells in the block.

To enter the sample into the block, left click on the top square of a cell. The sample's icon will appear in the square. The button underneath the cell will appear depressed and this shows that it's the current cell.

You don't have to stick with the original note for the sample. You can use the same sample many times in a song and have it played differently each time. Now you have a sample in the block, click on the keyboard icon in the Sample section. A keyboard will open in a window. Try clicking on a few of the keys and you'll soon see how you can make the sample sound higher or lower. You'll be in Edit mode by default so your last key will be the one used for the sample in the cell you're editing. You can also left click on other cells while the window is open to enter the sample with that key into those cells. Take some time to experiment with the other features here because you can also enter the sample in real-time using the Enter mode, and more besides.



The keyboard window allows you to change the key that each cell plays for the sample it contains. It makes samples very versatile.



When you load a sample, you assign it an icon from this window so it's recognisable to you when it's placed within a cell.

Be careful not to left click on other cells containing the sample when you've changed a key for a sample or you'll overwrite that cell with the last implementation of the sample. To just play a cell sound without editing it, right click on the cell instead.

You can change the sound of each sample in the cells by using the keyboard. Build up a block using different samples and different keys. Remember that each cell isn't an entire sample – the sample from a cell isn't played in its entirety before the next cell is played. This means that you must leave adequate space after a cell for the sample to be played out before entering another sample into that particular channel. You can, of course, have different samples playing at the same time by using the different channels. This method isn't a restriction, but rather an extra feature because it means that you can actually cut off samples before they reach their end. This is very useful for making quick tempo pieces. Again, experimentation should make this a lot clearer.

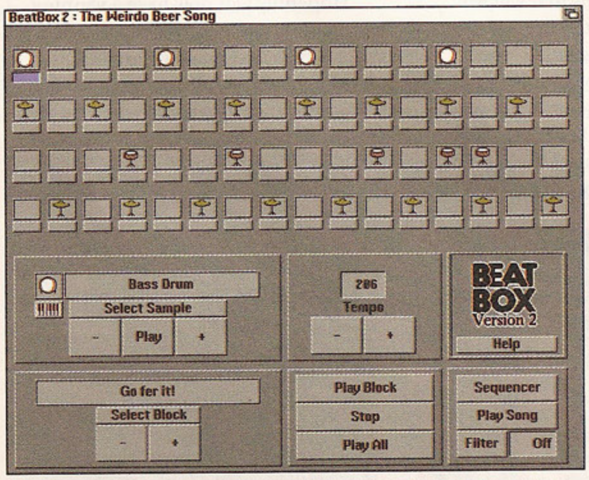
If you ever want to remove a sample from a cell, right click on the button below the cell to clear it.

When you have a block full, you need to create a new block. By default the Blocks are just named Block 1, etc, but you can click in the name and type in a new one – call the first Intro, or something like that, so you can recognise it later. This is important because when you come to use the sequencer to re-order or re-use blocks in a song, it's almost impossible to do so from memory of what "Block 22" was. To add a new block, click on the "+" icon. You can move up and down blocks, as you can samples, using the "+" and "-" buttons under the Select buttons.

When you have a set of blocks for your song written, save the song, if you haven't already done so, from the Project menu. Now click on the Sequencer icon. This opens a new window split into two columns. On the left is the order of the song and on the right are all the blocks in your project.

Left click on a block to insert it into the song order. You can click on blocks in the song to choose where you put them. Blocks can be repeated as many times are you like and there's also a loop facility for looping the song back from one block to another. If you want to remove a block from the song, right click on it. Click on the Close gadget to return to the main screen. To hear the song played back, use the Play Block and Play Song buttons. The Stop button will halt both playbacks.

There's a lot more to the program than this and playing around should soon reveal more about the way it works, but you can also read the online help guide by clicking on the Help button in the program. *BeatBox 2* is now Freeware so the program is complete, but you still need to register with the authors. The details are in the docs.



The blue button under a cell shows that it's selected. As you can see, each block is made up of four channels with sixteen cells in each. An icon in a cell depicts a sample there.



Games disk

AMIGA FORMAT



Dave Taylor introduces this month's double bill, featuring a full video poker simulation and a retro beat-em-up.

Video Poker

Visit Vegas and you'll see this game in every casino. Now you don't need to leave your Amiga to get a bit of the feeling of the high life. *Video Poker* differs from regular poker in that you aren't playing against other players. The aim is purely to get the best hand you can, and certain hands will win you money.

When the game loads up you're presented with the simple play screen. On the top left are three buttons for controlling the game. You can cash out, which allows you to cash in your winnings and leave the game, the High Score button shows the current high score table and the Stats button takes you to a screen which shows you how your current game is going, including the highest you've scored and what your win/lose ratio is.

> "The amount is set before the cards are dealt so you have to choose your stake on how lucky you're feeling."

The game itself is played from the bottom of the screen. In the bottom left there is the bet amount. You start with a pot of $100 and you can bet anything from $1 to $5 on each hand. The amount is set before the cards are dealt so you have to choose your stake on how lucky you're feeling.

In the top right of the screen you can see the list of hands that will win money, together with the breakdown of how they're paid according to your stake. For example, if you only bet $1 and have two pairs in your hand, you win $2, but if you had bet $5 you would have won five times that, $10.

When you're ready, click on the deal button next to the Bet section. Five cards are dealt to the main area of the screen. You need to make a guess at which cards will give you the best chance of completing one of the winning combinations as shown in the winning table in the top right of the screen. When you've decided which cards you want to keep and which cards you want to lose, click on the cards that you want to dispose of and they'll be discarded. (This is different to many card games where you click on the cards that you want to hold on to.) Click on the Deal button again and the dealer will deal you new cards for the ones that you've discarded.

Hopefully you now have a winning hand because, if not, you've just lost the game. If you do lose, click on Deal to play the next hand. If you've won, the bottom right of the screen will have a new set of buttons, labelled Double "Yes" and "No". This is the tradition of video poker where you can take your



Video Poker **– all the excitement of gambling, without having to mortgage the house.**

HANDY TIPS

If you've never played poker or video poker before, here's a quick guide to what the possible winning hands are so you can decide which cards to keep when playing. Always play the odds as it should provide the best chance of winning.

JACKS– The lowest winning hand; simply requires a pair of Jacks. Pays the stake.

TWO PAIR– Any two pairs. Pays twice the stake.

THREE OF A KIND– Three matching cards. For example, three Kings. Pays triple the stake.

STRAIGHT– Five consecutively numbered cards. Can be of differing suits. For example, two hearts, three diamonds, four hearts, five spades, six clubs. Pays four times the stake.

FLUSH– Five cards of the same suit, but not consecutively numbered. For example, two, four, six, ten and queen of clubs. Pays six times the stake.

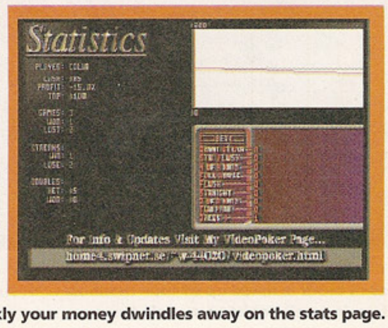
FULL HOUSE– Three of a kind and a pair together. For example, three kings and two fours. Pays nine times the stake.

FOUR OF A KIND– All four cards of same number from each suit; four matching cards. Pays 25 times the stake.

STRAIGHT FLUSH– Five cards from the same suit in a consecutive order. For example, three hearts, four hearts, five hearts, six hearts, seven hearts. Pays 100 times the stake.

ROYAL FLUSH– Like a straight flush, but where the cards are the top cards from the suit. For example, ten clubs, Jack clubs, Queen clubs, King clubs, Ace clubs. This is a very rare hand – you're only supposed to get one of these in your life! Pays 1,000 times the stake.





See the best winners and then marvel at how quickly your money dwindles away on the stats page.

LEGEND

Long before *Tekken*, way before *Body Blows*, back before *Streetfighter*, there was *The Way of the Exploding Fist*, and it was good. Yes, those of us who remember the 8-bit days (heck, I even seem to remember there being a Spectrum port, though I may be wrong) will remember just how groundbreaking and addictive the first beat-em-up was. Well, in homage to the late, great game, *Legend* resurrects it on your Amiga.

To load the game you need to first ensure that the disk you booted from has the Amiga's math libraries (i.e. it needs to have Workbench installed correctly). You then need to make an assign for Legenddata: to the directory that you unpacked the game to. To make things easier, we've included a script called Make Assign in with the game. Double click on this before loading. If you don't want to have to do this every time you load the game, you'll need to add an assign in your user-startup.

When the game loads, you'll go straight into it. There are many different game modes so press the F2 key to choose between them. In the top right of the screen you'll see some text telling you which game mode you've selected. When you want to start the game, press F1. The games range from single player or two player games to full tournaments.

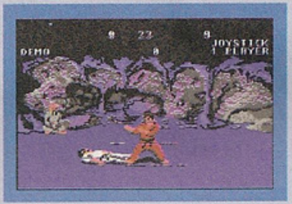
The game itself is controlled by the joystick. There are lots of different moves and they're all available from a combination of directions and the fire button. The documentation details all the moves and you should read it or else you'll find the computer doing back flips and roundhouses while you're still struggling with the forward punch.

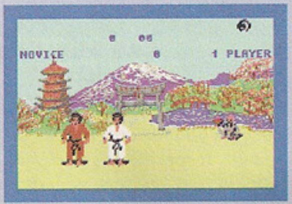
Each time a player knocks down an opponent he'll be awarded a single or double point, as indicated by the black and white symbols above the player, and the first to four wins the bout. There's also a clock to beat, so don't just wait around for an opening or you might lose if your opponent has already knocked you down once.

Watch the old man sitting in the background as he judges you. As you play against the computer, you win not only bouts and points but you also progress through the belts, so you start at Novice and go through 1st Dan and onwards.

The game is as good as the original, so putting nostalgia aside it's still worth playing – you've got to hear the sound effects! The author has released the game as Shareware and does ask for a contribution if you keep playing. More details can be found in the documentation. "Fight!"











Who can forget the elation of finally performing a roundhouse kick? Also included is a blood mode, *Mortal Kombat*-style, that I don't recall in the original.

winnings on a hand and gamble them for double or quits. It's not a complex procedure. If you decide not to gamble, your winnings go into the bank so you have more money to bet with. High scores are decided by the highest amount of money you ever have during the game, rather than the amount that you have when you decide to cash out, so you might decide to take the money and run.

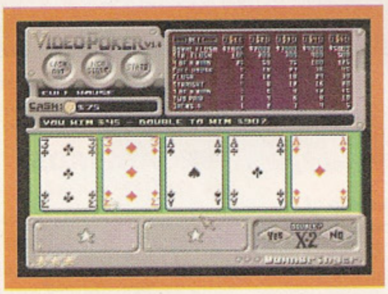
If you're a gambler though, click on the "Yes" button. The cards are shuffled and dealt. One card is face up and the remaining four are face down. You simply have to select a card that is higher than the one shown by clicking on one of the four cards. Aces are high. It's pure chance and if you win then you can choose to double again. In that case the cards are re-shuffled and dealt again and you can keep going for as long as your bottle holds.

If you lose at any point, even if you've previously won a double bet, then you lose all the money that you'd won from that hand.

Enjoy the game and remember – don't ever gamble anything that you can't afford to lose...

Pick a card that's higher than a seven and you've doubled your money.

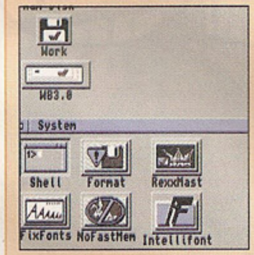




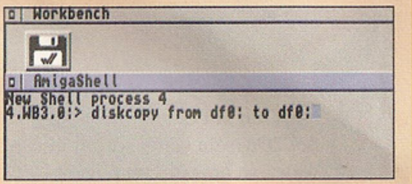
Full House. I'm beginning to get into this gambling malarkey.

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

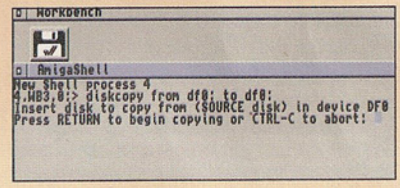


1 Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.

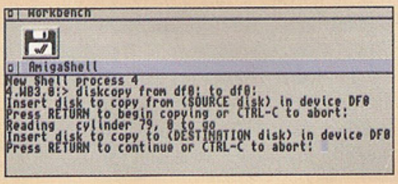


2 Type in the following line (with a zero, not the letter O), taking care to put the spaces in the correct places:

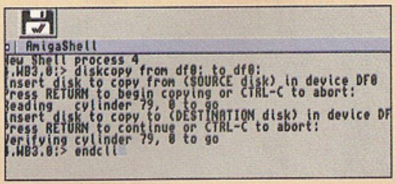
DISKCOPY FROM DF0: TO DF0:



3 When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.



4 Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.



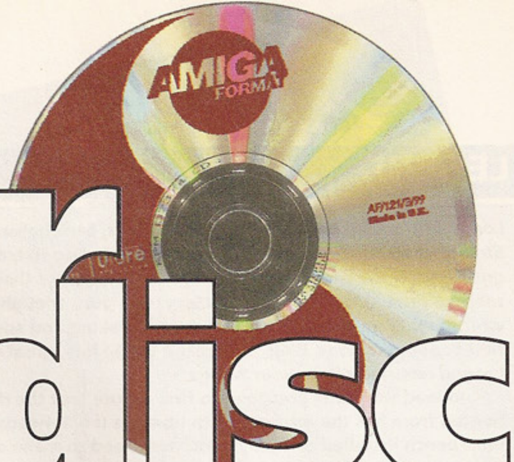
5 On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.

DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, with 2x26p stamps and an SAE to:

***Amiga Format* (insert name of disk)**
TIB PLC • TIB House
11 Edward Street
Bradford • BD4 7BH

If there is a manufacturing error then the stamps will be returned with a replacement disk.



Coverdisc

AMIGA FORMAT



Howdy, howdy, howdy! Welcome to the 37th superlative *AFCD*. Ben Vost presides and guides you round its circular magnificence.

We got ten out of ten for *AFCD36* from Chris Wright in Wales, so how can we possibly improve on that? The answer is that we continue to strive to bring you the best in Amiga-based entertainment value, from the megademos we have on this issue's CD to the audio tracks we've included. There's plenty here to keep you going for the next four weeks in terms of serious stuff too, so let's begin.

READER REQUESTS

-In_the_Mag-/Reader_Requests

We've got a packed Reader Request section and it seems that many of you are pleased by the fact that we offer this service – invaluable for non-netters, and even for those who are but don't want to download megabytes of material and would rather we did it for them.

There's all sorts of things in there this issue, from patches for *ImageFX* to a complete *Tex* archive. If you have a yearning for something in particular and would like to see us search for it, just follow the instructions in the Reader_Requests drawer.

THE SYSTEM DRAWER

+System+

Just thought I'd chuck in a bit about the +System+ drawer in case you haven't looked in it for a while. Not only does it contain the essential *AFCDPrefs* and *AFCDFind* that you may well use on a regular basis, but there are also other useful files there.

The info drawer contains files that tell you how to send in your work for the CD, along with a history of what's been changed on the CD as it gets more and more mature. The Readme template is for people who really don't want to have to think about their contributions to the disc, and the AFCD_Survey is a feedback tool to let us know what you think of the *AFCD* and how it can be improved. Do make use of it as it'll help us to make the CD better for you.

Last but definitely not least is Amiga Angels, a text file containing contact info for all the people brave enough to volunteer their services to fellow Amiga users. If you contact any of the people on this list, please be sure to thank them profusely for their help since they're doing this out of the goodness of their hearts.

There's an AFCD_Files installer which copies the latest version of *Installer* and *AFCDView* to your C: drawer, plus the *MUI* drawer which contains that most necessary of software add-ons for your machine (if you want to install it, use the archive in the MUI_Install drawer).

In the tools draw we have a collection of vital tools to keep your Amiga in tip-top condition, or to make it prettier or more productive. If you find yourself hunting for a backup program, have a look here first as we've got the best Shareware for you.



You may not have seen it recently, but it's very handy indeed!



Ask and ye shall receive. We welcome all your requests for stuff to put on the CD.

IS THIS CD A BIT LIGHT?

Not really, no – it's actually likely to be fuller than some of the other CDs we've done. Although Workbench only shows the data portion of the CD as being 534Mb, there are two audio tracks on the disc that show off just what can be achieved with *Sequencer One Plus*.

MEGADEMOS

-In_the_Mag-/MegaDemos

We often get asked to put the latest demos on our CD, but it's not always easy. For a start, since we're a family magazine we don't want to put something on our coverdisc that may offend a large proportion of our Amiga-owning readership. Secondly, these demos often contain copyrighted material that Future wouldn't like us to include. Thirdly, some demos just sometimes don't run on my machine, and if they don't run they don't go on the CD. Even so, we've managed to gather together eight demos for you to gawp at, all of which have been tested on my A4000/'060. If they don't work on your machine, please don't ring to complain – demo coders aren't famous for their system friendliness…

MAC FUN!

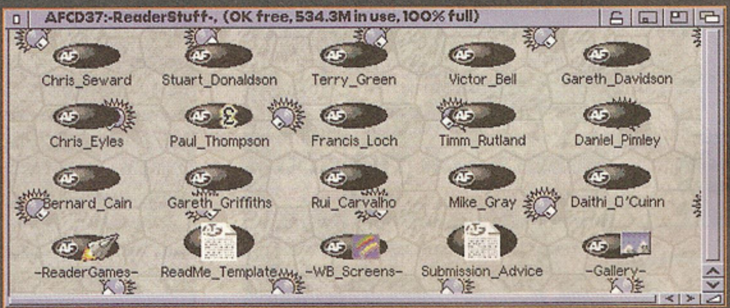
-Seriously_Amiga-/Emulation/ShapeShifter

The battle raged between *Fusion* and *ShapeShifter* for so long that it's easy to forget that *ShapeShifter* was the first Amiga program to offer easy-to-accomplish Mac emulation. Of course, all good things come to an end, so with a final flourish Christian Bauer has updated *ShapeShifter* so that it now

Your Stuff!

Reader of the Month £50 Winner!

A good month for reader contributions, and if you're unsure of when your submission will get on our disc, the best way (if you have email) is to subscribe to the all-new *AFB* which has a calendar on its web page, at http://www.egroups.com/list/afb/. Anyway, enough plugging.



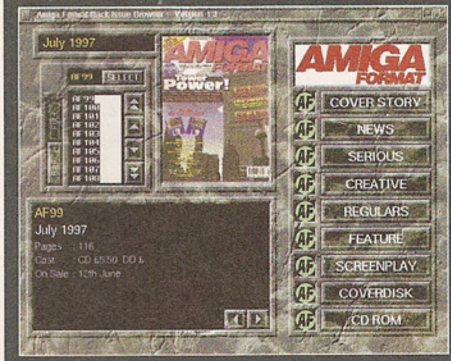
Okay, so it's not a very international line-up this month.

The winner this CD, and deservedly so, is Paul Thompson for his very informative interactive guides to Tutankhamun and the Titanic. Neither are very new, and while references to Ancient Egypt are probably immutable, the huge level of interest in the Titanic because of James Cameron's film has meant that the subject has been heavily scrutinised. All the same, both guides are informative and well programmed and are worth the prize money we'll send out.

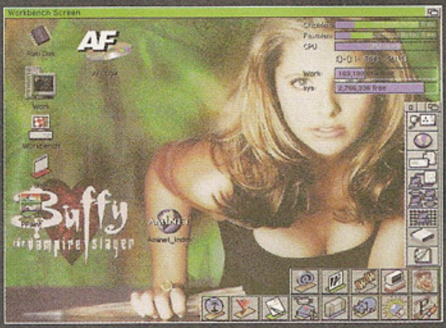
However, the competition was extremely stiff for this *AFCD*. The prize nearly went to Timm Rutland, whose work you may remember from previous *AFCDs*. I said that the amount of effort he'd put into his *Back Issue Browser* was phenomenal and that it would be hard to maintain. Timm's proved me wrong by coming up with an updated, improved *Back Issue Browser* which has more info about every issue and a slightly modified interface. He's also trying to work on adding a search facility to the program, but feels somewhat hampered by his lack of a manual for *CanDO*. If anyone can help...



Tut and Tit... anic. Oh come on, I'm sure you came up with this one too!



Timm Rutland's *Back Issue Browser* should come in pretty handy.



If you're proud of the way your Workbench looks then send it in, like Ville Ovaska did.

As for other entries, well, aside from the usual contribution of *Business Card Maker* from Bernard Cain, which can now work its business card magic in a more square pixel mode, albeit interlaced, we have contributions from around the world. There's Rui Carvalho from Portugal who has given us his program for receiving FTP files via email, and... okay, so everyone else comes from somewhere in the British Isles, but the WBScreens drawer has entries from Norway and Germany, so there.

Talking of which, if you've got a lovely-looking Workbench screen, why not send it in to us to put on the CD? The instructions can be found in the drawer.

supports System 8.1 and, more importantly, has made it Freeware. You no longer need a keyfile to access Mac hard drives or hard drive partitions, CD-ROMs should also work and so on. Mac emulation has never been so easy!

WHAT, NO CD32 SUPPORT?

We've had to change the way the CD is mastered here at AF Towers, and that means you'll no longer be able to boot from the *AFCD*. However, we don't feel that this is a big downer for quite a few reasons:

1 If you had to boot the *AFCD* then you probably weren't going to get the best from it. Most CD32 owners in our experience now have a hard drive in an SX-1 or better, and so they're able to boot from that instead.

2 People booting our *AFCD* on their A1200s would miss out on the careful set-up of their own machines in favour of the rather ignored *AFCD's* set-up. We'd rather you used our CD as a data CD anyway, and this will ensure that you do.

3 Finally, the room that's been freed up by not needing to include separately installed versions of *MUI*, or a WBStartup, might not be very much, but every little bit counts, as I'm sure you'll appreciate.

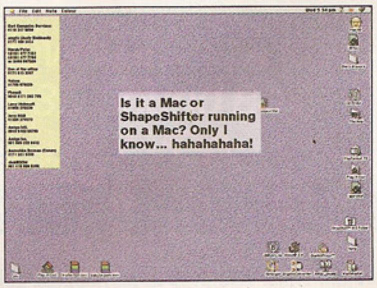


CD32 support may be gone, but all is not lost.

MORE MAC FUN!

-Seriously_Amiga-/Emulation/vMac

As one emulation comes to an end, so another is born. *vMac* is actually a PPC Mac emulator. No hang on, don't get worked up yet, it's a PowerPC program to emulate a Mac Plus, so don't get excited about running *Quake 2* or anything. It's early days yet, but perhaps this project will eventually emulate modern Macs...



Great Mac emulation – only an Amiga makes it possible...

I SAY, YOU CAD!

-Seriously_Amiga-/-Commercial-/CycasDemo1.78_FPU

There's a lot you can say about 3D CAD packages, from their origins on our

Continued overleaf ➡

At your fingertips

ANYONE GOT A LIGHT?

-ScreenPlay-/-Commercial-/Moonbases_demo

If you fancy a *Command and Conquer*-type game and you're just itching for *Napalm*, why not give *Moonbases* a try? There are two versions here, one for AGA Amigas and one for those blessed with a graphics card.

PUT IT ON YOUR DRIVE

-ScreenPlay-/HD_Installers

Don't forget to check this drawer to see if your favourite game of yesteryear can now be patched to work from your hard drive instead. There are nine new installers on this CD.

FASTER THAN A SPEEDING BULLET

-Seriously_Amiga-/WB/FastIPrefs

You may have seen this program mentioned in the main feature this month, and here's the latest version, hot off the presses. Some of the changes include a setting for *Opus WBR* users, and some arguments to support centring of pictures, etc, and their remapping precision.

GO 3D

-Seriously_Amiga-/GFXCard/Warp3D

Although it's still in its early days and only supports the CyberVision 64/3D card, Haage & Partner's *3D API* is shaping up and will hopefully soon provide support for the CyberVisionPPC's Permedia 2 chip and the 3DFX Voodoo add-on planned for the PicassoIV. This will hopefully then usher in a new set of development for 3D games in much the same way that *CGFX* and *Picasso96* did for RTG.

platform to the current state of the art, but all of a sudden, out of the left field, here comes a program called *CYCAS* by Anja Frese.

Since there isn't a whole lot of info in the readme file that comes with the package, I can only tell you what I know about it. It's commercial, it's by someone called Anja Frese who won an award with it all the way back in 1993 and it's been used privately and updated constantly since then, and now it's finally available in English.

As for features, well, it can import and output DXF files as you'd expect, but it can also save files as *Lightwave*, *Real3D* or *Postscript*. On the CAD side of things, it's really designed as an architectural modelling package so you won't find fillets and the like in it, but things such as openings for doors or windows are obvious and it does a nice job of presenting things in 3D, as well as the various plan views.

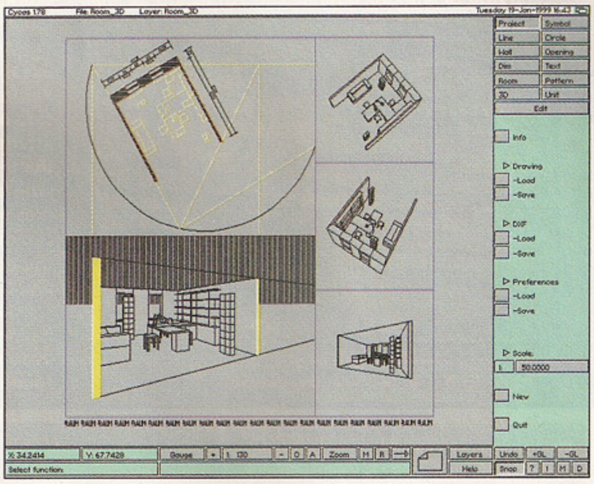
Oh yes, and it feels almost obscenely fast! The authors have obviously worked extremely hard on making sure that it extracts every erg from the Amiga's processor and the result is a blindingly quick, albeit not particularly Amiga-styled, interface.

SOURCE FOR THE GOOSE

-ScreenPlay-/Other_Stuff/Source_Codes

Just as the source code for *Doom* was released last Christmas, this New Year saw the release of the source code for Raven Software's *Hexen* and *Heretic*. We have them both on the CD for you so you can compile your own versions of these extremely popular first person perspective shoot-em-ups.

Both are based on the original *Doom* source code so it probably won't take very long for someone to bring out full games, similar to the way the *Doom* ports appeared, and in fact, as I write this, the first *Heretic* port has been completed. There's no sound or networking yet, but the port should be on our next CD.



***CYCAS*'s interface should make dedicated CADders feel at home.**

DISCLAIMER

This *AFCD* has been thoroughly scanned and tested at all stages of production. We recommend that you always run a virus checker on ANY software before running it. Future Publishing Limited cannot accept any responsibility for disruption, damage and/or loss to your data or your computer system which may occur while using this disc, the programs or the data on it. Ensure that you have up-to-date backups of data contained on your hard drives before running any new software. If you do not accept these conditions, do not use this disc.

DISC NOT WORKING?

If your *AFCD* is defective, please return it to the address below. Please make sure you have followed our installation procedures correctly to ensure that there is no physical problem. Please send us the *AFCD* along with a description of the fault (not forgetting your name and address). A new working version should be returned to you within 28 days. The return address for faulty discs is:

TIB PLC • TIB House • 11 Edward Street • Bradford • BD4 7BH

Your *AFCD* should only need replacing if the CD itself cannot be read. If, instead, you are experiencing problems with an individual application, phone our technical support line.

This is open between the hours of 2pm and 5pm every Tuesday.

Tel: 01225 442244 Fax: 01225 732341

Email: amformat@futurenet.co.uk

(Please remember to put "Coverdisc" in the subject line.)

Please note that the helpline staff provide assistance with technical problems directly related to the CD and cannot provide training on the software or hardware in general.

We want your work!

You can either send it to us on floppies, Zip disks or CDs (we do take other media formats too). If you are going to send us a multiple floppy backup of your work, please use the version of *ABackup* we supply on the CD in the +System+/Tools/Disk_Tools drawer. We'll return any Zips you send us, so don't worry about getting your disks back.

If you have any further queries about how to send your software in then consult the Submissions Advice on the CD (in Ben_Speaks!, or in the ReaderStuff or +System+/Info drawers).

Your signature: ....

Files you send in this month will probably appear on *AFCD39* – *Amiga Format* issue 123, May.

Please tell us:

Your name: ....

Your address: ....

....

Your postcode: ....

A contact number or email address: ....

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(1) the material is original and does not infringe any other material or rights;
(2) the material does not contain any material which is defamatory, obscene or indecent and is exempt from classification under the Video Recordings Act 1984;
(3) that there are no legal claims against the material provided;
(4) that I have full power and authority to provide this material to Future Publishing.

AF 121 – MAR 1999

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If you have a feature idea, a long term test, a reader request or you want to be in the Amiga Angels list, send an email to ben.vost@futurenet.co.uk, with "Features", "Reader Review", "Reader Request" or "Amiga Angels" in the subject line accordingly. If you don't have email, a letter to the *AF* address with the same subject headings is also fine.

If you want to speak to us about a technical problem, we have a reader call day on Tuesdays. Call us on (01225) 442244 (10am–1pm, 2pm–5pm only). We're sorry, but we can't give games tips over the phone.

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19,220 January – June 1998

Next Month

No, really, it's finally here – the long-awaited NAPALM!

Check out our definitive review of this great real-time strategy game!



PLUS: *Reviews of:*
*Prelude 1200, **3D Sound Box**, TurboPrint 7, **EZ VGA**, Atéo Tower, **EZ Genlock** and much, much more...*

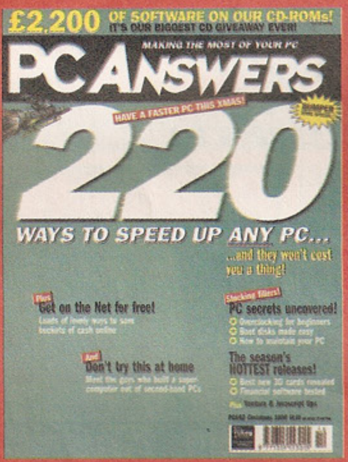
April Issue on sale March 15th, 1999

The contents of future issues may be subject to change – no guarantee is implied or intended.

AMIGA FORMAT advertisers index

If you've got a PC as well,

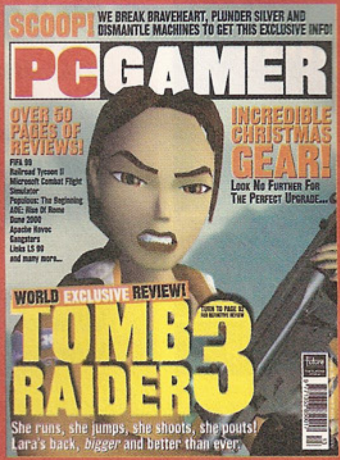
WE'VE GOT IT COVERED!



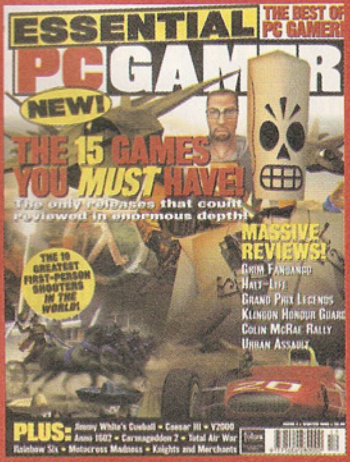
The essential guide for anyone who wants to make the most of their PC.



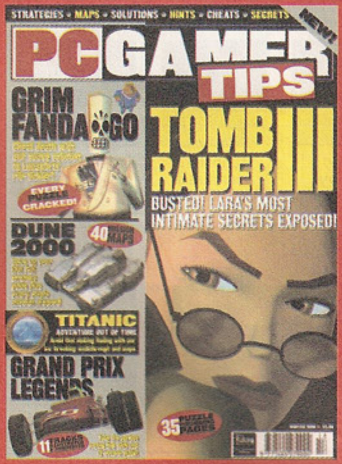
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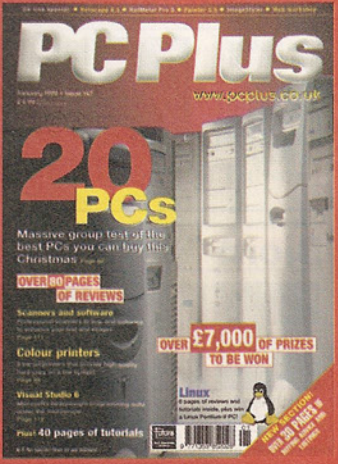
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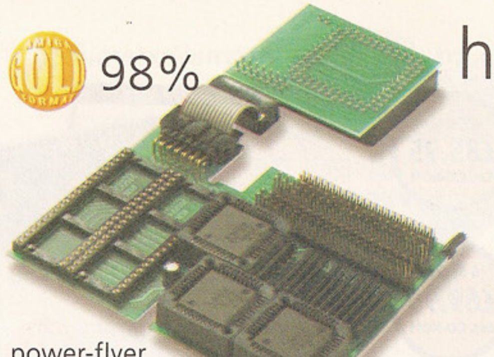
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ScanMagic Internal with Flicker Fixer ______ £79.95
ScanMagic External ______ £55.95
ScanMagic External with Flicker Fixer ______ £95.95

picasso iv

Picasso Hi-res graphic card ______ £249.95
Picasso accessories available - please call

monitors - with 3yr on-site warranty

15"SVGA monitor
for graphic cards or ScanMagic ______ £125.95
17"SVGA monitor (.26 pitch)
for graphic cards or ScanMagic ______ £245.95

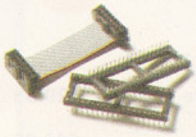


miscellaneous

PowerMovie (animation editing software)
Non-commercial licence ______ £34.95
The Golem (game on 2 CD's) ______ £TBA
Power Graphic Tablet ______ £159.95
Breathless 3D game (new low price) ______ £9.95
Big Red Adventure CD ______ £9.95
Official Amiga mouse and mat ______ £9.95
NEW Trackball Mouse ______ £29.95
CD32 Joypad (for any Amiga) ______ £9.95
NEW 4 Player Adaptor - upto 4 joysticks ______ £8.95

gvp products

A1200 SCSI Interface for GVP A1230acc. ______ £49.95
HC4008 SCSI controller
and RAM expansion (up to 8MB) ______ £99.95
GURU ROM ______ £49.95



Socket-Raise for clockport. Fits underneath the PowerFlyer. Inc. cable £5.95

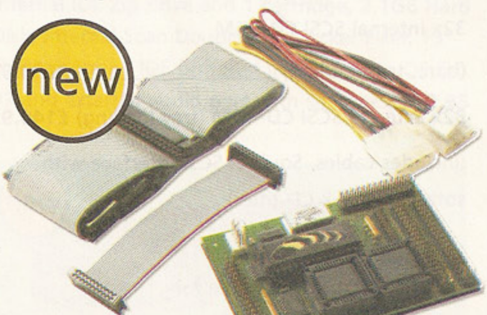
power-flyer for the A1200

Power-Flyer, 4-way enhanced IDE/ATAPI controller, Supports the latest PIO-3 and PIO-4 faster modes, Autoboot from Zip and LS-120 ______ £55.95
A4000 PowerFlyer - available soon ______ £POA

powerflyer junior - 92% AF gold

PowerFlyer is a 16-bit version of the PowerFlyer and is fully upgradable to 32-bit ______ £45.95
32-bit upgrade - (unlike competitors) ______ £10

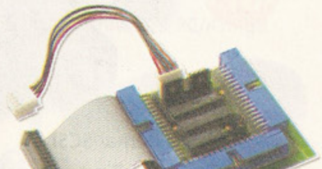
new



catweasel Mk 2

A4000/A1200 advanced floppy drive controller, can use most PC floppy drives ______ £49.95

kylwalda - bootadaptor

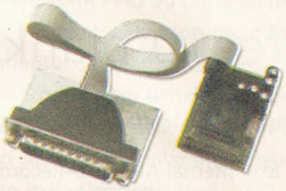


This bootadaptor fits all Catweasel models and allows you to boot from drive '0'. You can also use a standard PC FDD ______ £19.95
PC Floppy Disk Drive ______ £20

4-way buffered interface & IDEfix '97

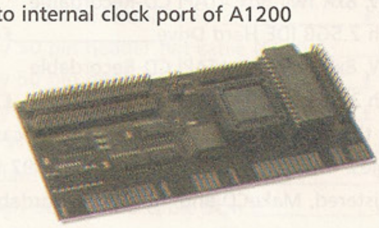
4-way buffered interface with IDEfix '97, inc. fully registered software ______ £29.95

3-way IDE cable and
44-pin 10cm cable for above ______ £9.95



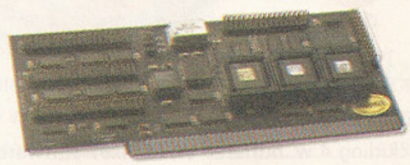
powerport junior

1 x High speed Serial Internal ______ £29.95
Fits to internal clock port of A1200



buddha flash - IDE controller

Buddha Flash for all Zorro bus Amigas, Zorro IDE controller, up to 4 IDE/ATAPI devices, support LS120, Zip and Syquest and any removable media, includes special version of IDEfix97, A1200 clock port for fast serial port or Catweasel ______ £49.95



buddha enhanced IDE controller

Buddha - Enhanced IDE controller for Zorro II systems. (IDE, Atapi,CDFS, CD32 emulator) £79.95

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2xW, 8xR External ATAPI CD-Recordable ______ £279.95
2xW, 8xR TwinBox ATAPI CD-Recordable with 2.5GB IDE Hard Drive ______ £429.95
2xW, 8xR TwinBox ATAPI CD-Recordable with 32 speed ATAPI CD-ROM ______ £379.95
(All the above external bundles include: case, cables. 4-way IDE interface with IDEfix 97 fully registered, MakeCD and 10 blank recordable CDs)

For any external removable device we offer the PowerFlyer instead of the 4-way buffered interface for **£49.95**



LS120

LS120 120MB Internal ATAPI including 4 w. buffered i/f, Idefix97 software, IDE cable and 1cartridge ______ **£99.95**

LS120 120MB Internal ATAPI (bare unit only) ______ **£69.95**

LS120 120MB External ATAPI including 4 w. buffered i/f, Idefix97 software, IDE cable and 1 cartridge ______ **£139.95**

LS120 cartridge ______ **£9.95**

cd-rom drives internal/external



ATAPI cd-rom drives

6x Internal ATAPI CD-ROM (bare unit) ______ **£29.95**

6x External ATAPI CD-ROM ______ **£69.95**

32x Internal ATAPI CD-ROM (bare unit) ______ **£45.95**

32x External ATAPI CD-ROM (tray loading) **£85.95**

36x Internal ATAPI CD-ROM (bare unit) ______ **£54.95**

36x External ATAPI CD-ROM (tray loading) **£94.95**

(includes cables, 4-way buffered interface with IDEfix 97 fully registered software and 2 CD titles)

SCSI cd-rom drives

32x Internal SCSI CD-ROM (bare, tray loading) ______ **£89.95**

32x External SCSI CD-ROM (tray loading) **£149.95**

(includes cables, Squirrel SCSI interface with software and 2 CD titles)

squirrel interface

Squirrel interface - suitable for any scsi-device ______ **£39.95**



iomega zip

Zip 100MB external SCSI including Amiga Zip tools, cable and 1 cartridge (requires Squirrel or any SCSI interface) **£139.95**

Zip 100MB internal ATAPI including 4 w. buffered i/f, Idefix97 software, IDE cable and 1 cartridge ______ **£119.95**

Zip 100MB internal ATAPI (bare unit only) ______ **£75.95**

Zip cartridge ______ **£12.95**

hard drives



Plug and play hard drive. Includes cable and is already partitioned

2.5" 340MB IDE including IDE cable and install disk ______ **£45.95**
2.5" 1.3GB IDE including IDE cable and install disk ______ **£109.95**
3.5" 2.5GB IDE including IDE cable and install disk ______ **£99.95**
3.5" 3.2GB IDE including IDE cable and install disk ______ **£129.95**
3.5" 5.1GB IDE including IDE cable and install disk ______ **£159.95**
3.5" 6.4GB IDE including IDE cable and install disk ______ **£174.95**

(5.1 and 6.4GB HD are supported automatically by the PowerFlyer or by IDEfix 97 using the patch provided, an updated FileSystem is available on www.amiga.de) Please note that cables included with 3.5"HD have standard 40pin headers. If you need to connect a 3.5" HD directly to the A1200 motherboard, you will need a special "stack" cable 44 high density (2.5") to 40 standard (3.5") IDE cable ______ **£12.95**



floppy drives

A500/A600/A1200 Internal Drive ______ **£34.95**
A2000 Internal Drive ______ **£39.95**
PC880E External for all Amiga models ______ **£39.95**
XL 1.76MB External for all Amiga models ______ **£65.95**
XL 1.76MB Internal for A4000 ______ **£60.95**

power modem bundles

Economy bundle 1*
56.6 Kbps Fax/voice including iBrowser web browser, Net & Web ______ **£79.95**

Economy bundle 2*
as above plus
Power Port Junior fast serial interface ______ **£99.95**

*All modems are internet ready and include 30 days FREE subscription with Demon Internet.



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power tower

NOW INCLUDES 230 WATT PSU



amiga 5000 march '99

monitor, speakers, mouse and keyboard not included, see power tower specs

£129.95

power tower for a1200

Power Tower Bare _______ £129.95

Power Tower 1
Power Tower plus A1200 motherboard, mouse, PC keyboard and FDD _______ £349.95

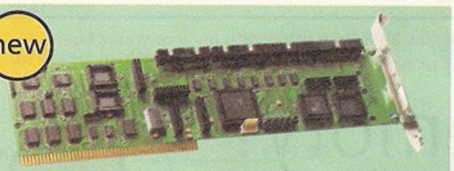
Power Tower 2
Power Tower, A1200 motherboard, mouse, PC keyboard, Typhoon 68030 40MHz, 8MB of RAM, 2.1GB Hard Disk, IDE buffered interface, IDE Fix 97 and FDD _______ £579.95

Power Tower 3
Power Tower, A1200 motherboard, mouse, PC keyboard, Typhoon 68030 40MHz, 24MB of RAM, 32x CD-ROM, 2.1GB Hard Disk, IDE buffered interface,IDE Fix 97 and FDD _______ £639.95

Power Tower 4
Power Tower plus A1200 motherboard, mouse, PC keyboard, FDD, Typhoon 68030 40MHz, 40MHz FPU, 40MB of RAM, 32x IDE CD-ROM drive, Internal IDE Zip drive and 1 cartridge, 2.1GB Hard Disk, internal Scan Doubler inc. Flicker Fixer, 15" SVGA monitor, IDE buffered interface inc. IDE Fix 97 and external audio port with speakers £979.95

Power Tower Bundles (excl. bare Power Tower) inc. 3 pieces of s/w

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I/OBlix Zorro 2 Interface - 4 x serial, 1 x parallel (optional 2nd port) for the A2000/4000 £99.95

amiga 3.1 operating system

Amiga 3.1 OS for A1200/3000/4000 ROM chips, disks and manuals _______ £45.95
Amiga 3.1 OS for A500/600/2000 ROM chips, disks and manuals _______ £39.95
Amiga 3.1 OS disk set and manuals _______ £19.95
Amiga 3.1 OS A1200/3000/4000 chips only £29.95
Amiga 3.1 OS A500/600/2000 chips only _£25.95

new amiga 1200 motherboards

A1200 motherboard without ROMs _______ £99.95
A1200 motherboard with ROMs _______ £125.95

A replacement motherboard is usually the best long term solution if you have a damaged or unreliable A1200.

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Not universal   Universal PC/Amiga



keyboards & interfaces

A1200 desktop universal keyboard int. ___£19.95
A1200 tower universal keyboard int. _____£19.95
PC Keyboard interface only (A1200) _____£19.95
Amiga Keyboard interface only (A1200) __£19.95
Original A4000 keyboard only* _________£39.95
Original PC keyboard only* ___________£14.95

*requires keyboard interface

new

power tower accessories

PCMCIA "V" adaptor _______ £19.95
External audio port _______ £15.95
"Y" cable to mix CD audio to the Amiga audio _______ £9.95
Internal to External SCSI adaptor (Internal 25 pin female connector, Internal 50 pin header External 25 pin male connector) _______ £19.95
SCSI II converter from(PPC) 50 pin high density to 25 D male, including extension cable to the Int/Ext SCSI adaptor _______ £29.95
SCSI converter from 50 pin female Centronic to 50 pin header (for internal connection of SCSI device to squirrel or similar interfaces) £9.95
50 pin male to male Centronic lead _______ £14.95
50 pin female to male Centronic lead _______ £14.95
25 pin D female to 50 pin male Centronic lead _______ £14.95
3 way 50 pin header flat cable (SCSI) _______ £9.95
5 way 50 pin header flat cable (SCSI) _______ £14.95
7 way 50 pin header flat cable (SCSI) _______ £19.95
Ultra WIDE SCSI cable made on request _______ £POA
Standard 3 way IDE cable (3.5") _______ £4.95
44 high density IDE cable 5cm _______ £4.95
44 high density IDE cable 10cm _______ £7.95
44 high density IDE cable 80cm _______ £14.95
44 high density (2.5") to 40 standard (3.5") IDE cable _______ £12.95
Internal floppy extension cable (34 pins) for Towers _______ £4.95
Parallel Printer cable _______ £12.95
Serial Modem cable _______ £9.95
Internal to External male to female 9 pin D Extension lead for Surf Squirrel Serial Port or similar products _______ £4.95
200 Watt speakers _______ £35.95
80 Watt speakers _______ £19.95

amiga 1200 magic pack

A1200 3.1, 2MB 68020, AGA chipset, Wordworth 4.5SE, Turbocalc 3.5, Data store 1.1, Photogenic 1.2SE, Personal Paint 6.4, Organizer 1.1 Pinball Mania and Wizz games _______ £179.95
As above with 260MB Hard Drive fitted _£219.95
As above with extra 8MB RAM _______ £259.95

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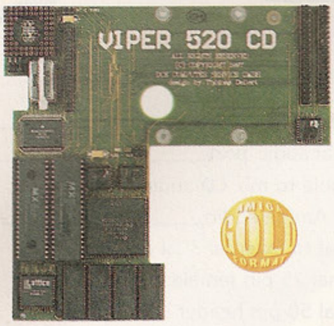
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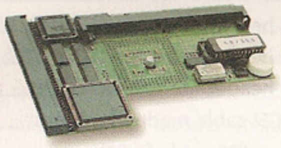
amiga accelerators cards



accelerator boards for a500

Viper 520CD, 68020EC 33MHz, without MMU, optional 33MHZ PGA FPU, space for one 2.5"HD, support for up to four IDE/ATAPI devices, 8MB of Fast RAM on board and 3.0 Kickstart ROM including full 3.0 Workbench disk set FAT Agnus slot to fit Mini Mega Chip ____ £99.95

Mini Mega chip (2MB Agnus chip and 1MB extra Chip RAM) ____ £79.95



accelerator boards for a2000

Apollo
full 68030 25MHz with MMU, including FPU, Up to 64MB of Fast RAM ____ £129.95

Apollo
full 68030 50MHz with MMU, optional 50MHz FPU, Up to 64MB of Fast RAM ____ £159.95

50MHz FPU for above ____ £29.95

accelerator boards for a600

Viper 630,
full 68030 33MHz with MMU, including FPU, Up to 32MB of Fast RAM, PCMCIA friendly ____ £65.95

accelerator boards for A1200

Viper Mk2, 68030 40MHz, (up to 32MB), full MMU, optional FPU (PLCC 40MHz only) ____ £65.95

Viper Mk2, 68030 40MHz, (up to 32MB), full MMU, FPU 40MHz ____ £75.95

Apollo with full 68040 25MHz, up to 64MB ____ £125.95

Apollo with full 68040 40MHz, up to 64MB ____ £185.95

Apollo with full 68060 50MHz, up to 64MB ____ £269.95

To resolve lock-up during multi-tasking on Amiga revisions 2b & 1d.x fitted with an accelerator board we will modify it for £19.95, or call us to do it yourself for free.

need more memory?

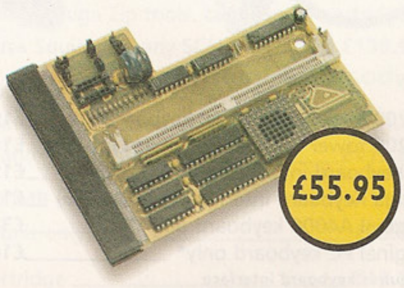
RAM prices are subject to change

memory modules and fpu

for accelerator and expansion boards

4MB SIMM ____ £14.95
8MB SIMM ____ £19.95
16MB SIMM ____ £35.95
32MB SIMM ____ £55.95
32MB SIMM, slim for Blizzard 1260 accelerator boards ____ £79.95
64MB SIMM ____ £139.95
1MB ZIP RAM static column for A3000 ____ £16.95
GVP custom 4MB RAM module ____ £49.95
GVP custom 16MB RAM module ____ £99.95
20MHz PLCC FPU ____ £10
33MHz PLCC FPU ____ £15
40MHz PGA FPU ____ £20
50MHz PGA FPU ____ £29.95





ScanQuix
Version 4



NEW ScanQuix 4 award winning scanning software only **£49.95**

NEW Turbo Print 7 **£38.95**



epson printers

Epson 440 - colour inkjet ____ £139.95
Epson 640 - colour inkjet ____ £179.95
Epson 740 - colour inkjet ____ £239.95
Epson Stylus Photo 700 ____ £215.95
TurboPrint 7 ____ £38.95
Upgrade from version 6 to TurboPrint 7 ____ £18.95

flatbed scanners

NEW Epson GT7000 SCSI scanner (requires SCSI interface) ____ £199.95
Mustek SP6000 Scanner ____ £99.95
Image FX scanner driver software ____ £149.95

memory expansion boards

A1200 4MB not upgradable, with battery backed-up clock ____ £39.95
A1200 bare with standard SIMM socket with battery backed-up clock ____ £39.95
A1200 with standard 4MB SIMM socket with battery backed-up clock ____ £45.95
A1200 with standard 8MB SIMM socket with battery backed-up clock ____ £55.95
PGA 40MHz FPU for all the above cards ____ £15.95
A500 1MB Chip RAM with battery backed-up clock ____ £19.95
A600 1MB Chip RAM with battery backed-up clock ____ £24.95
A500 2MB RAM with battery backed-up clock ____ £49.95
CDTV 2MB RAM ____ £49.95

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